AUGUST 15, 1949

MODERN MEDICINE

The Journal of Diagnosis and Treatment

Dr. Alan C. Woods
(see page 8)

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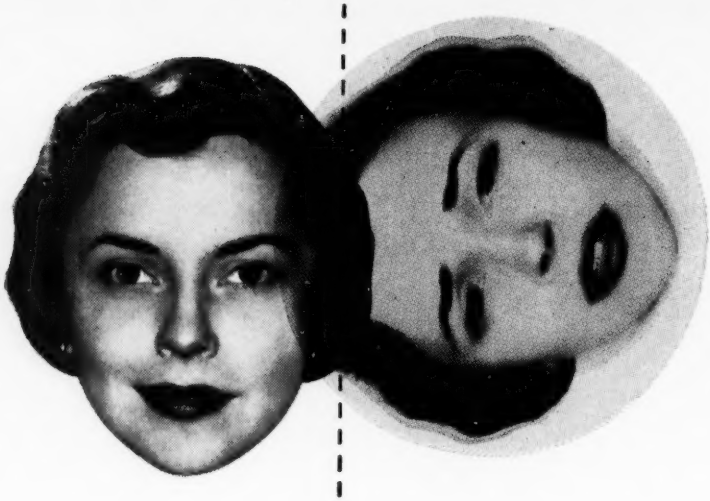

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For liquid dosage . . . Syrup Nethaprin.® Pleasant tasting. Nethaphyl's effective relief, enhanced by Decapryn's long-lasting antihistaminic action in seasonal and other allergies. *Each 5cc contains: Nethamine® 25 mg., Theophylline (U.S.P.) 50 mg., Decapryn® Succinate 6 mg.*

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1—*Hansel, F. K.: Ann. Allergy, 5:397, 1947.*

The Doctor's Album of New Mothers

NO. 26: LUCKLESS MRS. LINCOLN

Everything happens to Mrs. Lincoln. Her mathematics is wrong—so she goes into labor ten minutes after you've caught a plane for the convention.

Since she *knew* it would be a girl, her nursery and bassinet are pink, all pink. Yep—it's a boy.

And because she's fortune's football, she's sure that Sonny's speckles must be Rocky Mountain Spotted Fever—and insists you come out at midnight to see.

Even mothers with a better luck-record than Mrs. Lincoln's can get excited over such a common infant phenomenon as prickly heat.

That's why so many doctors suggest frequent dustings of pure, soothing Johnson's Baby Powder, to help *avoid* disturbing irritations.

Johnson's Baby Powder is recommended by more doctors and hospitals than all other brands put together.

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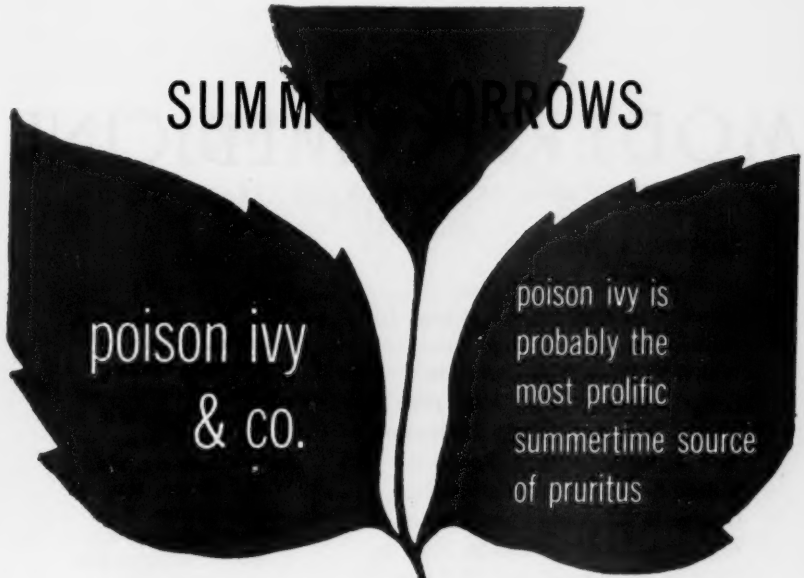

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of dermatitis venenata, the famous CALMITOL "Ivy Leaf"* reproduces an exact cut-out of the *rhus* leaf and gives some simple criteria for plant identification.

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CALMITOL affords swift, sustained and *safe* control of itch caused by dermatitis venenata or of any other origin. Completely free from dangerous drugs such as phenol, cocaine and cocaine derivatives, CALMITOL effectively and safely blocks the pruritic impulse at its point of origin through the antipruritic action of camphorated chloral, hyoscyamine oleate and menthol.

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MODERN MEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT

description

A smooth, uniform, antipruritic ointment, composed of cooling, soothing **Calamine,** 8%, analgesic **Benzocaine,** 3%, and antiseptic **Hexylated Metacresol,** 0.05%, in a fragrant, water-washable, greaseless base. Supplied in 1½-oz. and 4-oz. tubes.

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Symptomatic relief of sunburn, itching dermatitis due to poison ivy, poison oak, or other allergens, diaper rash, pruritus, hives, insect bites and other minor skin irritations.

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Analgesic Calamine Ointment (Greaseless)

Contents for August 15 1949

VOL. 17, NO. 16

THE MAN ON THE COVER is Dr. Alan Churchill Woods, clinician, teacher, and author. He began teaching at Johns Hopkins Medical School in 1915 and since 1937 has been Ophthalmologist-in-Chief at Johns Hopkins Hospital. During the war he was consultant in ophthalmology to the Surgeon General of the Army, a member of the National Research Council, and one of a committee to review physical standards for induction. Dr. Woods is a frequent contributor to ophthalmological journals and is author of the paper on ocular sarcoidosis reviewed on page 47.

SHOCKPROOFING

Allergens are shocking to many regions of the body when they set up a biochemical tumult. In allaying distress or in shielding from attack, 'Histadyl' (Thenylpyramine Hydrochloride, Lilly) has multiple virtues. Side-effects are slight and rare.

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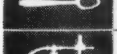	SOLUTION

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Contents for August 15 1949

CONTINUED

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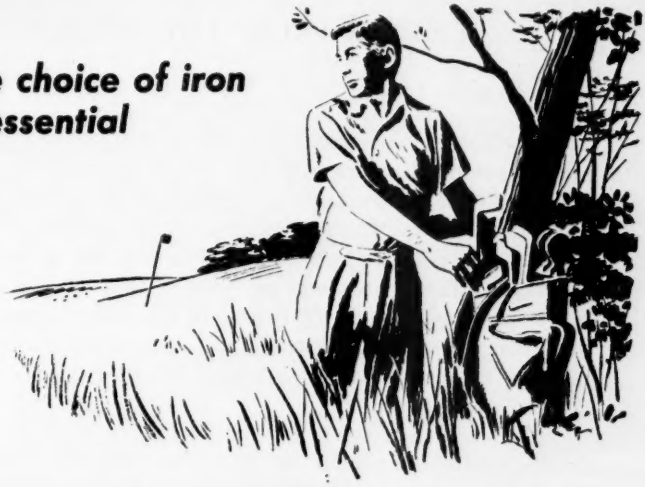

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LETTER FROM THE EDITOR

Dear Reader:

The value of objective findings in making a diagnosis is unquestioned. Hunches may turn out to be right, but few of you would be satisfied until you had elicited every possible bit of data that might disprove or confirm the first guess.

This passion for facts carries over into the doctor's fields of interest other than medicine. But in these other fields facts are sometimes difficult to obtain. In the realm of economics and politics many judgments are made on an emotional basis because facts are so muddled by propaganda that the truth is often obscured.

We were pleased, therefore, when we read Dr. A. M. Snell's leading article in the May issue of *Gastroenterology*, "Report of a Recent Medical Journey Through Europe." Dr. Snell devotes several pages to medicine in the British Isles and concludes by saying:

"Incidentally, a very fair and temperate appraisal of the medical practice act has been presented by Feasby (Feasby, W. R.: Modern Medicine 16:37-40; 98-100 [Dec.] 1948). My own observations are in close agreement with those he has presented."

Previously we had received a letter from a prominent publisher of medical books who expressed an almost identical sentiment. We thought you would like to know that Dr. Feasby's report, prepared to supply you with unbiased information, hit the mark so closely in the estimation of leaders in medical practice and medical journalism.

As this is written the July 1 issue carrying Victor Cohn's first article on "How the British Doctor is Getting Along" is just being mailed. We did receive a request for advance galley proofs however, from Dr. Herbert P. Ramsay who read an announcement of the series just before he was to testify before a congressional Health and Welfare committee hearing.

Yes, doctors like facts, and they get facts in MODERN MEDICINE whether the report is on diagnosis and treatment, or on a controversial economic subject.

A NEW, DRAMATIC THERAPY FOR THE RELIEF OF PAIN AND LESIONS OF

HERPES ZOSTER

DESCRIPTION: Protamide is a sterile, aqueous colloidal solution of a specially processed proteolytic enzyme, for the maximum relief of nerve root pains of Herpes Zoster and Tabes Dorsalis.

CLINICAL RESULTS: Highly gratifying clinical results have been obtained with the use of **Protamide** (Sherman) in the treatment of the extremely resistant herpes syndrome. Pain has been relieved in the great majority of herpes cases within four to forty-eight hours and lesions have healed in ten days or less—regardless of the particular nerve roots involved. Complete clinical data may be obtained by writing for the Protamide literature on Herpes Zoster and a recent reprint on Protamide for Tabes Dorsalis.

DOSAGE: In Herpes Zoster the recommended dosage is 1.3 cc of Protamide intramuscularly each day from two to four days. No contraindications or incompatability have been reported to date. All Protamide is clinically tested for positive results. Can be stored at room temperature without loss of potency.

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and bile salts—Robins (with their new prod
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form to that part of the gastrointestinal tr
where pH conditions for optimum activity preva
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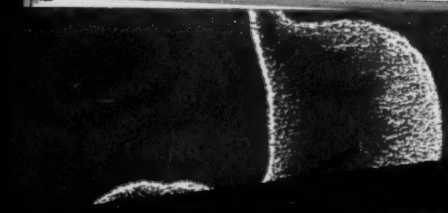
cholecystitis, post-cholecystectomy syndrom
subtotal gastrectomy, infectious hepati
pancreatitis and chronic dyspepsia—where
unique selective therapy restores more nearl

ENTOZYME

Robins



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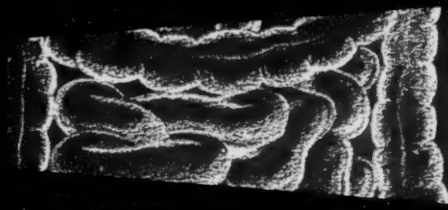

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DOSAGE: 1 or 2 tablets after each meal, or as directed by physician, without crushing or chewing.

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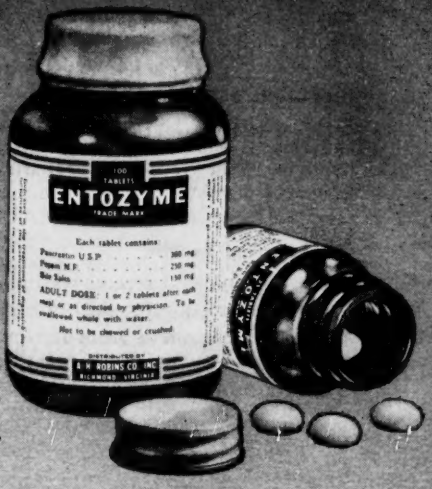
REFERENCES: 1. McGavack, T. H. and Klotz, S. D.: Bull. Flower Fifth Ave. Hosp., 9:61, 1946. 2. Weissberg, J., McGavack, T. H. and Boyd, Linn J.: Am. J. Digest. Dis., 15:332, 1948.



A coined word to describe the unique mechanical action of Entozyme Tablet—whereby pepsin is released only in the stomach, and pancreatin and bile salts only in the small intestine.

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Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10 St., Minneapolis 3, Minn.*

Desk Charts in Demand

TO THE EDITORS: I consider *Modern Medicine* the best all-around medical magazine for the GP. Please send me a set of desk charts on tropical diseases.

EARL J. HADEN, M.D.

Ore Bank, Va.

► TO THE EDITORS: I should appreciate very much your sending me a reprint of the chart "Tropical Diseases Caused by Parasites," which appeared in the June 15, 1949 issue of *Modern Medicine*.

Also permit me at this time to congratulate you on the fine quality and up-to-the-minute reporting in your journal.

I subscribe to seven medical journals but still feel that yours is the best I have read.

GEORGE H. FLESSAS, M.D.

Brookline, Mass.

¶Desk charts will be sent to Drs. Haden and Flessas, and to all others who have requested them as soon as the charts are received from the printer.—Ed.

Great Deal of Benefit

TO THE EDITORS: I receive your magazine and derive a great deal of benefit as well as enjoyment from it.

LAIRD MCNEEL, M.D.

Fort Atkinson, Wis.

Longevity in Texas

TO THE EDITORS: The first time I heard the joke at bottom of page 124 (June 15, 1949), I kicked the slats out of my cradle. But the way I heard it was this: The old 102'er was sitting on a rock beside the road, crying. Somebody asked him why he was crying. He said Pa had just whipped him for cussing Grandpa. That's how old they live to be in Southwest Texas.

J. J. HORTON, M.D.

Eagle Pass, Tex.

British Doctor Wants MM

TO THE EDITORS: During the last few months at Northwestern University Medical School I have been a recipient of *Modern Medicine* and have greatly enjoyed its digests, which cover trends in all phases of the practice of medicine.

I will, unfortunately, soon have to leave this country, my appointment with the above university having terminated. I am writing to request that, if possible, you continue to keep my name on your mailing list to receive this journal after I have returned to England.

T. H. FRANK GILLESPIE, M.B.

Chicago

¶Arrangements have been made to assure continuance of Dr. Gillespie's enjoyment of *Modern Medicine*.—Ed.

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Positions in Chest Surgery

TO THE EDITORS: The abstract of my paper on cardiocirculatory reactions in chest surgery which appeared in the June 15 issue of *Modern Medicine* (p. 51) was well done. However, in the fourth paragraph you state, "The lateral operative posture should be maintained from the outset . . . including anesthesia and tracheotomy." This last word is an error of interpretation. It should be "endotracheal intubation"—a different procedure.

CHARLES L. BURSTEIN, M.D.
New York City

X-Ray Treatment of Ganglion

TO THE EDITORS: A Wisconsin M.D. requested suggestions for treatment of a pea-sized ganglion on the finger which recurs despite repeated incision (*Modern Medicine*, June 15, 1949, p. 34).

May I refer the questioner and your Orthopedic Consultant to the excellent article by Dr. Robert E. Gross, "Recurring Myxomatous, Cutaneous Cysts of the Fingers and Toes" (*Surg., Gynec. & Obst.* 65:289-302, 1937). My chief reason for writing is that Dr. Gross's patients and 3 of my own have responded best to x-ray therapy, about which your Consultant was somewhat pessimistic.

S. M. MC COY, M.D.
Brooklyn

► TO THE EDITORS: I would like to refer your Consultant who doubts the efficacy of x-ray therapy for removal of a recurring ganglion to an article by Dr. Robert J. Reeves (*South. M. J.* 37:584-586, Oct. 1944).

Dr. Reeves reports 15 patients treated by x-ray, followed at least one year, with 87% apparent cures.

M. A. SISSON, M.D.
San Francisco

Antibiotics for Herpes

TO THE EDITORS: Has Dr. Michael H. Ebert tried chloromycetin for the treatment of herpes? *(Modern Medicine,* June 15, 1949, p. 48.) Having used it for a five-year-old girl with extensive herpes zoster of the chest wall, with complete disappearance of the lesions in one week, I certainly intend to use it again.

ERNEST W. BAUER, M.D.
Hazel Park, Mich.

¶ In reply, Dr. Ebert writes: "Dr. Bauer has reported excellent results with the use of chloromycetin in the treatment of herpes zoster. When the article on the herpes problem was written I had had no experience in the use of chloromycetin or aureomycin in the treatment of herpes simplex or herpes zoster. It is now known that these antibiotics are of value in the treatment of certain rickettsial infections and some virus disorders. I have been told by an experienced ophthalmologist that he has had remarkable improvement in ophthalmic zoster with the use of aureomycin locally and by mouth. As experience accumulates we may be able to state positively whether these new antibiotics are of value in the treatment of herpes. If there is no contraindication, there is no reason why they cannot be used."—Ed.

Excellent Presentations

TO THE EDITORS: Thank you very much for the excellent presentation of our paper on pleural effusion *(Modern Medicine,* May 1, 1949, p. 51).

A. H. AARON, M.D.
Buffalo

► TO THE EDITORS: May I take this opportunity to congratulate you on your excellent editorial work as evidenced by your well-composed condensations which never fail to stress the important central theme of each paper.

ADOLPH POSNER, M.D.
New York City

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the protection of **rutin** the action of **aminophylline** the sedation of **phenobarbital** —for use in selected cardiovascular and diabetic conditions in which excessive capillary fragility presents a complicating hazard —bottles of 100 tablets

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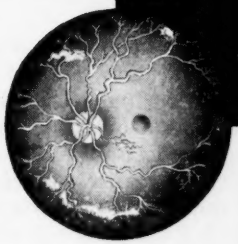
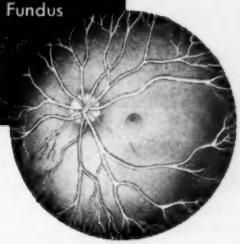


Normal Ocular Fundus



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schenley laboratories, inc., 350 fifth ave., new york 1, n. y.

How to Administer Aminophylline

TO THE EDITORS: In respect to the danger of intravenous aminophylline (*Modern Medicine*, Apr. 15, 1949, p. 18), I wish to state that to the asthmatic, even with moderately advanced arteriosclerotic heart disease, this medication can be and is a boon. However, and take heed, this medication must be ever so slowly dribbled into the vein. If given quickly, the patient will clutch at his chest in pain and gasp for breath. Coronary spasm probably takes place, followed by coronary dilatation and relief of pain.

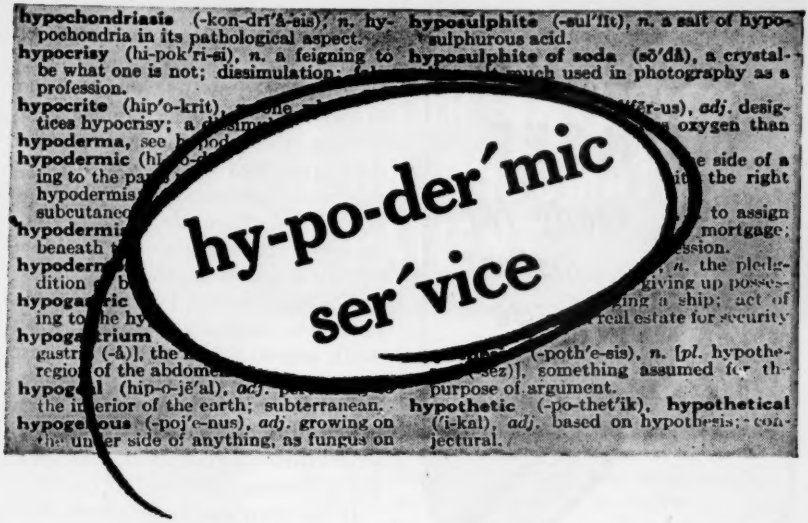
After the first cubic centimeter of intravenous aminophylline solution is slowly given, the administration should be halted until the patient experiences any of the following: mild chest pain, quick gasp as in air hunger, lightheadedness, fear, funny taste in mouth, or numb feeling around mouth and chin. Then, with intermittent stops after each 1 to 2 cc., the remainder can be given without danger of serious reaction.

The old story of knowing your patient is important. Many can take intravenous aminophylline quickly with very little discomfort outside of mild dizziness, moderate gasping, or flush. Therefore, be conservative, work slowly, and give the patient the extra few minutes which I am sure will spare you a few very anxious seconds.

The reported intravenous aminophylline deaths were due, I sincerely believe, not to the aminophylline per se, but to the mistaken judgment and procedure of the administrator.

ROBERT R. SCHWARTZ, M.D.
Bronx

Movie Lists by Topics
will be prepared on request to
MODERN MEDICINE



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Not Congenital Hemolytic Anemia

TO THE EDITORS: In Case MM-142 of your Diagnostix series, you present an interesting hematologic problem (May 1, 1949, p. 86). It is clear from the data given that this patient is suffering from a spherocytic hemolytic anemia. The diagnosis of congenital hemolytic anemia, though possible, is definitely not established in the case.

The hypothetical Visiting M.D. dismisses the diagnosis of acquired spherocytic anemia by saying that such cases are a late appearance of the congenital form. This is in opposition to the belief of most modern hematologic authorities—a belief which is based on the following evidence:

It has been shown that normal red cells transfused to patients with congenital hemolytic anemia survive their normal life span (120 days). Giving normal red cells to patients with acquired spherocytic hemolytic anemia results in rapid, random destruction of these normal cells within a few days to a few weeks. The blood—both own and transfused—of these patients is destroyed by antibodies, which can be demonstrated by the fairly simple technic of Coombs' test. The blood of patients with congenital hemolytic anemia usually gives a negative reaction to Coombs' test, while patients with acquired hemolytic anemia show a positive reaction.

Since congenital hemolytic anemia responds to splenectomy in the vast majority of cases, while the acquired disease will be influenced by this operation in only about 50%, it becomes important for the physician to differentiate between these two entities.

The patient under discussion, a woman of fifty-one years, with a history of illness for three years, could well have had acquired spherocytic hemolytic anemia. The onset of the

for the more abundant life for

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disease at middle age and the absence of a palpable spleen would favor such a diagnosis.

A complete study should include detailed hematologic examination, including osmotic fragility tests and reticulocyte counts, of the patient's parents, if alive, and children. Many patients with familial hemolytic anemia are completely asymptomatic clinically but show evidence of the disease by an increased red cell fragility, spherocytes in the blood film, and high reticulocyte counts. A Coombs' test, as explained above, will further clarify diagnosis, since this test is negative in the familial form of the disease.

Another point in the laboratory findings deserves brief comment. It is stated that the blood bilirubin is normal without quoting the numerical value. Any hemolytic disease will have a relative increase of blood bilirubin due to increased turnover of hemoglobin which ultimately is broken down to bilirubin. If, however, the initial hemoglobin level is low, as in the case under discussion, there is a diminished amount of raw material (hemoglobin) for conversion to bilirubin and the resulting bilirubin level, though still near the upper limits of normal, will represent a definite increase over what would have been found in the absence of a hemolytic process.

I have been enjoying your diagnostic exercises and hope that you will continue them.

ARNO G. MOTULSKY, M.D.

Chicago

Good Reading

TO THE EDITORS: *Modern Medicine* makes good reading.

ARTHUR M. MASTER, M.D.

New York City

Forensic Medicine

COMPILED BY ARTHUR L. H. STREET, LL.B.

PROBLEM: A general practitioner, engaged to treat a fractured femur, called in an orthopedic surgeon without the patient's request or consent and continued to attend the patient himself. The surgeon did not set the leg properly and the patient lost his leg. Could the practitioner be held liable for the surgeon's neglect?

COURT'S ANSWER: Yes.

The Kentucky Court of Appeals said that when two physicians treat the same patient concurrently, they may divide the service as the circumstances require. Each is answerable not only for his own negligence but also for any wrongful act or omission of the other which he observed and permitted to continue without objection or which, in the exercise of reasonable diligence, he should have observed. The court added that there was sufficient evidence produced to justify a jury in deciding that the general practitioner was liable (217 S. W. 2d 822).

PROBLEM: A seven-year-old school pupil fractured her arm while playing during recess. The school principal, unable to locate the mother, took the child to a doctor. Was the doctor justified in placing the child under anesthesia preparatory to operating—which resulted in death—without obtaining the mother's consent?

COURT'S ANSWER: Yes.

The Louisiana Court of Appeal, First Circuit, followed a rule of law generally applied by the courts in suits brought by parents for operations upon their minor children without consent: In an emergency, a surgeon may, after fair and careful examination of the patient, exercise his best judgment as to the necessity for immediate treatment or operation. It is the doctor's right and duty to do what the case demands, within the usual practice in similar localities, without consent of the parents.

The Court of Appeal determined that in this case the doctor had followed the usual and customary practice among physicians and surgeons in the locality (39 So. 2d 196).

PROBLEM: A man requested a doctor to treat a child living in his family. The physician did not learn until after a second visit that the patient was not the man's daughter but a niece. The uncle paid the drug and nursing bills incurred during his niece's illness. Did he impliedly bind himself to pay for the doctor's services?

COURT'S ANSWER: Yes.

In response to a contention that defendant was not liable, because the patient was a servant in the home and that her father, divorced from her mother, should pay the bill, the Minnesota Supreme Court noted that one does not render himself liable for a physician's services by merely requesting the doctor to treat a third person,

(Continued on page 32)

delayed diagnosis

is enemy number one of

DIABETICS

A million or more diabetics are undetected and untreated.† But only about 55,000 new cases are being discovered each year in the course of insurance examinations and routine checkups. Early diagnosis and prompt treatment give the physician his best opportunity to ameliorate the disease and to avert or delay its complications.

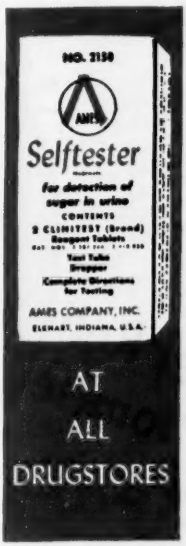
An urgent problem

How shall the unknown diabetic be detected and directed to the doctor's office for diagnosis and proper treatment?

An important answer

AMES *Selftester*•

a quick home screening test that brings those with glycosuria to you for diagnosis



The Ames Selftester for detection of sugar in urine is approved by the Council of the American Diabetes Association. It is a simple, reliable screening test to establish the presence or absence of urine-sugar and "refer" those with glycosuria to you for diagnosis.

The directions state:

1. **The Selftester does not diagnose diabetes or any other disease.** Its sole function is the detection of sugar (glucose) or sugar-like substances.
2. **If reaction is positive, see your doctor at once.** Sugar in your urine does not necessarily mean you have diabetes (nor does a negative result definitely exclude the presence of disease). But only your doctor, by medical examination and by additional laboratory tests, can tell you why you show sugar.

† Wilkerson, H. L. C. and Krall, L. P.: Diabetes in a New England Town, Journal of the American Medical Association, *135*:209 (Sept. 27) 1947.

• Ames *Selftester* —TRADE MARK

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New Pill Treatment For Ulcers Termed 'Distinctly Promising'
ATLANTIC CITY, N. J., June 8.—(AP)—A new and "distinctly promising" tablet treatment for peptic (stomach) ulcers was reported to the American Medical
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"It is believed that no other drug or method known will have an equal all-around effectiveness
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New Tablet Is Used to Treat Peptic Ulcer
BY FRANK CAREY
(AP Science Reporter)
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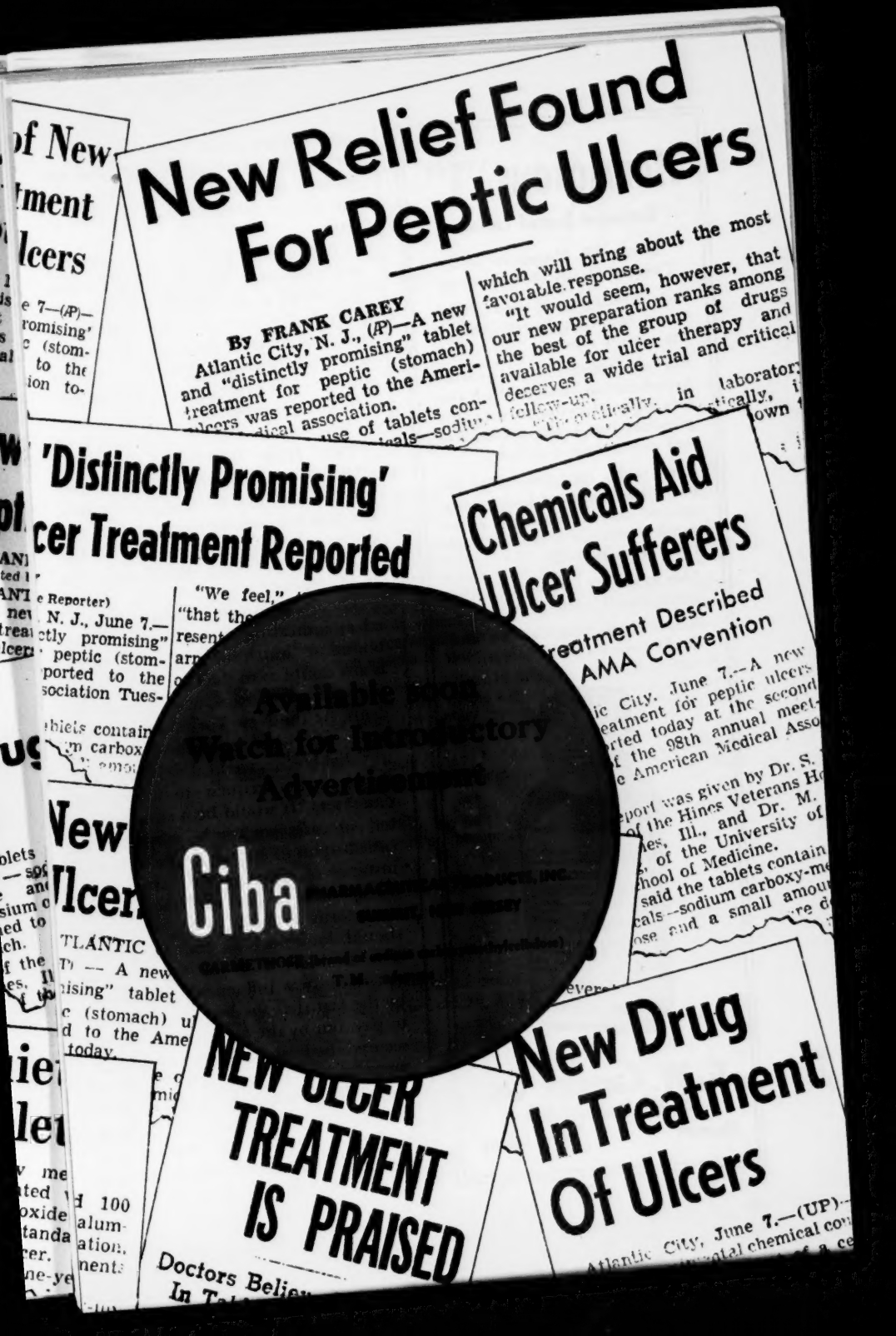
New Relief Found For Peptic Ulcers
By FRANK CAREY
Atlantic City, N. J., (AP)—A new and "distinctly promising" tablet treatment for peptic (stomach) ulcers was reported to the American
which will bring about the most favorable response.
"It would seem, however, that our new preparation ranks among the best of the group of drugs available for ulcer therapy and deserves a wide trial and critical
'Distinctly Promising' cer Treatment Reported
Chemicals Aid Ulcer Sufferers
Treatment Described AMA Convention
Available soon. Watch for Introductory Advertisement
Ciba
NEW ULCER TREATMENT IS PRAISED
Doctors Believe
New Drug In Treatment Of Ulcers
Atlantic City, June 7.—(UP)—

unless there is such relationship between the requesting person and the patient as to show obligation to pay the bill or other implied promise to pay.

Within this rule, an employer does not necessarily render himself liable by calling a doctor to treat an employee. It is also true that a father is liable for necessary medical attendance furnished his daughter, though the services are requested in his absence by another.

But, in this case, the uncle rendered himself liable because he consented to his wife taking the child to the doctor and did not tell the doctor that she was not his daughter or that the doctor would have to look to the father for pay (129 Minn. 399, 152 N. W. 763).

The decision is not to be interpreted as indicating that a doctor is not bound to "watch his step" when there is any doubt as to the responsible relationship of parties with whom he deals. As the New York Court of Appeals said when a mother was held not liable for medical services rendered at her request to a married daughter, "It would be a simple matter, in cases where the physician is called upon to attend a person, at the instance of someone not standing in a responsible relation to the patient, to inform himself as to whom he should look for his compensation." The decision that the mother was not liable was influenced not merely by the fact that she had not promised to pay, but by the fact that the doctor secured the husband's consent to treatment of the patient. The Court of Appeals said that the latter circumstance might be regarded as a recognition, at least, of the marital relation, with consequent responsibility or liability (207 N. Y. 516, 101 N. E. 577).

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Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: Ever since a hemorrhoidectomy under spinal anesthesia a patient has had persistent headache. Can you suggest a satisfactory treatment?

M.D., Ohio

ANSWER: *By Consultant in Anesthesiology.* True postspinal anesthesia headache is usually relieved by intrathecal injection of 5% dextrose. From 15 cc. to 40 cc. is required. A spinal fluid manometer should be used and enough dextrose injected to raise the pressure to 110 or 120 mm. of mercury. A single injection usually cures the headache if done during the first seven to ten days but may have to be repeated. After a longer time, treatment is less successful and the headache may last several weeks.

QUESTION: During the past fourteen months I have been treating a syphilitic patient. The therapy consisted of continuous alternate ten-week periods of dichlorphenarsine hydrochloride with ten-week periods of bisubsalicylate. The last Wassermann test was plus 4. In removing the needle from the sterilizer, after boiling about one minute, my left thumb was punctured, drawing blood. The puncture was immediately cauterized with pure phenol. Is there a possibility of my receiving a syphilis infection under these conditions?

M.D., New Jersey

ANSWER: *By Consultant in Venereology.* The amount of treatment which was previously given the patient was almost certainly sufficient to eliminate all risk as far as the physician was concerned. While prophylactic treatment has been considered in the past, there is a *fairly* general agreement that nothing should be done until a diagnosis can be established. In this case I would suggest periodic serologic tests for syphilis at intervals of one week for the first six or eight weeks, and then monthly for several additional times.

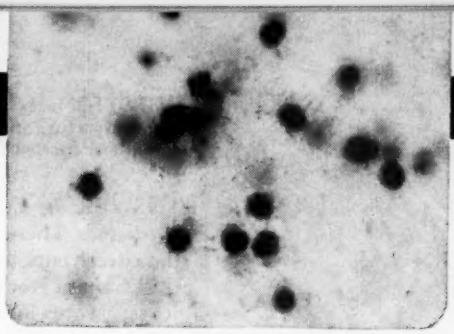
QUESTION: A young patient of mine is becoming very self-conscious because of underdeveloped breasts. Is there anything she can do except exercise? Would hormones help?

M.D., New York

ANSWER: *By Consultant in Gynecology.* The use of breast pads is a harmless and effective method of overcoming self-consciousness in this regard.

Administration of estrogens for development of breasts is a temporary measure which carries with it the danger of interfering with the menstrual cycle by inhibition of ovulation.

Therefore, unless the condition is accompanied by other signs of low ovarian activity such as amenorrhea, local or general use of estrogens is not recommended for development of breasts.



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QUESTION: Is either aureomycin or chloromycetin effective against Rocky Mountain spotted fever?

M.D., Tennessee

ANSWER: *By Consultant in Internal Medicine.* There is no doubt about the effectiveness of aureomycin in the treatment of Rocky Mountain spotted fever. More information is desired about chloromycetin.

QUESTION: What is the accepted treatment for sting ray injuries to feet of bathers? Most of the patients we see have had the foot or injured part soaked in ammonia water by the lifeguard department. Laceration is usually well cleaned and there is moderate swelling. The laceration where the stinger entered the skin is usually well anesthetized by the time I see the patient. I have been using injections of adrenalin and TAT and exploring the wound for evidence of broken sting.

M.D., California

ANSWER: *By Consultant in Dermatology.* The wound made by the sting ray is more mechanical than poisonous. It should be completely washed and sterilized but I do not think that washing with ammonia or other chemicals is effective. You are right in treating the patient to prevent tetanus. I would also advise intravenous calcium gluconate to avoid allergic reactions.

QUESTION: What constitutes a psychosis in a mental defective?

M.D., Mississippi

ANSWER: *By Consultant in Psychiatry.* Mental defectives are subject to the same types of psychoses as the ordinary individual and this group comprises about 2% of the psychotics in this country. According to the standard nomenclature of mental disease approved by the American Psychiatric Association, the diagnostic emphasis is to be placed on the character

of the reaction rather than on the incidental factor of mental deficiency. Thus these cases would be considered nosologically as psychoses with mental deficiency. The subdivisions include schizophrenia with mental deficiency, manic-depressive psychosis with mental deficiency, paresis with mental deficiency, and so forth.

Mental defectives are prone to acquire psychoses more readily than intellectually normal people and recover more quickly. The clinical picture resembles that characteristic of any of the psychoses, except that the hallucinatory or delusional formations are more primitive and transparent. The meaning or purpose of a delusion in an ordinary psychotic is often masked beyond recognition of its original intent, but in the mental defective, wishful, aggressive, erotic, or dependency fantasies are quite recognizable.

On the basis of psychologic classification, the moron has an IQ of 50 to 75; the imbecile 25 to 50, and the idiot below 25. Each can and does react through the entire gamut of emotions known to ordinary psychotics, but with progressively simpler and more direct expression.

QUESTION: Is there a powder that can be dusted down inside a body cast to remove irritation and odor?
M.D., Virginia

ANSWER: *By Consultant in Orthopedics.* The ordinary deodorant powders are useful in counteracting odors which arise from wearing a cast for a long period of time. The powders consist essentially of boric acid, benzoic acid, and zinc peroxide in a talc base. Most drugstores carry one or more. The powders are harmless to use and may be dusted into the cast as often as desired.

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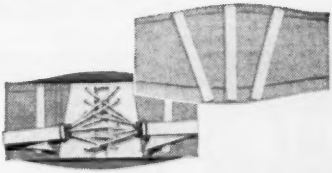

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MODERN MEDICINE

Heat-Reaction States

LOUIS FRIEDFELD, M.D.*
Beth Israel Hospital, New York City

EXCESSIVE heat causes many deaths in this country each summer. A large number of these fatalities could be prevented by proper prophylaxis and treatment.

The three distinct types of illness due to heat—cramps, exhaustion, and stroke—must be differentiated, since the therapy differs for each.

► *Heat cramp* is the mildest form of heat reaction and does not cause death. Painful contractions of the voluntary muscles of the extremities and the abdominal wall are the chief symptom. Nausea and vertigo may occur. Body temperature remains normal.

Depletion of sodium through perspiration causes the muscular cramps. An atmosphere of low humidity enhances the development of this form of heat reaction by facilitating perspiration.

Ingestion of extra amounts of salt provides prophylaxis. Therapy should include removal of the patient to a cooler environment and the administration of salt solution orally or intravenously.

► *Heat exhaustion* is characterized by peripheral circulatory collapse. Profuse sweating with depletion of sodium contributes to the syndrome, which comprises nausea, vomiting, oliguria, headache, vertigo, and vascular collapse. The skin is cool, moist, and usually pale, although often cyanotic.

The condition is common in elderly people and is aggravated by infection, debilitating disease, or circulatory impairment. Previously healthy people generally do not die of heat exhaustion.

Prophylaxis consists of adequate intake of salt and fluid and the avoidance of excessive exertion and exposure to heat. Active treatment should include measures to combat possible shock.

► *Heat stroke* is the most serious form of heat reaction and may be fatal in a few hours even for healthy people. Louis Friedfeld, M.D., emphasizes the importance of recognizing sudden cessation of perspiration after several days of extreme summer heat as the cardinal premonitory sign of the disease.

Conduction, convection, and radiation of heat from the body occur only at temperatures below 95° F. Thus, at higher environmental temperatures, sweating is the body's only form of heat dissipation. If derangement of the heat-regulating center in the hypothalamus stops the mechanism of sweating, hyperthermia and other symptoms will develop with rapidity.

* Prophylaxis and treatment of heat-reaction states. New England J. Med. 240:1041-1047, 1949.

The body temperature rises sharply and may exceed 106° F. The skin becomes hot, dry, and flushed. Convulsions, stupor, and other signs of central nervous system dysfunction may develop. The gait is staggering, the mouth dry. Thirst is excessive, although salt depletion is not a factor.

Mortality from heat stroke is high, particularly in infants, the aged, and physically active persons. After recovery from one attack the patient is prone to recurrences unless precautions are taken.

Preventive measures include light, airy clothing, frequent bathing, light meals, salt tablets, plenty of drinking water, and avoidance of exertion and of undue exposure to heat.

If a person stops sweating during a heat wave he should be put to bed, preferably in a room that is air conditioned. Sponge baths and fans are helpful. If perspiration does not start or if temperature rises, the patient is placed in an oxygen tent where the air is cooled and dehumidified. If fever continues to rise, the patient may be wrapped in cold wet sheets or sprayed with cold water.

The reappearance of sweating and abatement of hyperpyrexia are hopeful signs. Relapses must be guarded against.

The use of iced tub baths for the treatment of heat stroke is a drastic measure and may result in shock and death.

A URINE SUGAR TEST FOR THE BLIND DIABETIC, based on fermentation of sugar by yeast, is described by Elizabeth P. Covey, M.T. A pea-sized piece of fresh active yeast is placed in a 16-milliliter homeopathic vial, which is then completely filled with urine and covered tightly with a rubber finger cot so that the surface of the urine is in contact with the finger cot. After standing at room temperature for ten to thirty minutes the finger cot will bulge if sugar is present. The degree of ballooning is roughly proportional to the amount of sugar in the urine and, with practice, may be graded 1 to 4 plus.

Am. J. Clin. Path. 19:500, 1949,

A NION EXCHANGE RESIN as an adjunct in management of peptic ulcer may relieve symptoms and hasten recovery. In uncomplicated cases, ulcers usually regress within four weeks. Satisfactory results were obtained with resinat in 120 cases, report Samual Weiss, M.D., R. B. Espinal, M.D., and Jerome Weiss, M.D., of New York Polyclinic Medical School, New York City. No acid rebound or objectionable side effects were observed. Medication is given in 0.5-gm. doses hourly for a week or two. Then 0.25 to 0.5 gm. is given every two or three hours while the patient is awake. The resin acts as an absorbent, tends to coat the gastric mucosa, and is eliminated without chemical change.

Rev. Gastroenterol. 16:501-509, 1949.

Management of Status Asthmaticus

WILLIAM SAWYER EISENSTADT, M.D.*
Swedish Hospital, Minneapolis

STATUS asthmaticus is a medical emergency and the ingenuity of the physician may be severely taxed to prevent death. Probably the most important step in therapy is to interrupt epinephrine dosage at once.

William Sawyer Eisenstadt, M.D., obtains most favorable results with the following regimen:

► Hospitalization is imperative. Optimum treatment requires equipment, medicinals, and trained personnel usually unobtainable at home. The removal of the patient from possible allergens in the home environment frequently proves beneficial. Flowers are prohibited and precautions taken against dust. Mattress and pillows should be covered with nonallergic casings.

► Epinephrine, ephedrine, and other sympathomimetic drugs must be stopped. The patient is epinephrine-fast and further doses of these drugs only produce the undesirable side effects of adrenalin without influencing the dyspnea. After forty-eight to seventy-two hours adrenalin may be reintroduced in small doses. The aqueous form (1:1,000) in 0.3- to 0.5-cc. doses is preferred to adrenalin in oil.

► Hydration must be maintained. During the first few days of hospitalization 2 or 3 liters of 5% glucose in distilled water and isotonic sodium chloride solution may be given alternately. Oral fluids should be administered as tolerated. Hypertonic dextrose solution given intravenously thickens the bronchial secretions and should be avoided.

► Aminophylline is an effective bronchodilating agent for patients with status asthmaticus. The drug should be used cautiously, however, in the presence of cardiac complications. The initial adult dose is 0.25 gm. in 10 cc. of diluent given intravenously at a slow rate every four or six hours. Dosage may be increased to 0.5 gm. in 20 cc. if necessary for symptomatic relief. For children, 0.006 gm. per kilogram of body weight is administered similarly.

Rectal suppositories containing 0.5 gm. aminophylline are moderately effective. A retention enema of 0.5 gm. aminophylline powder in 30 to 60 cc. of tap water is also effective.

If the patient becomes aminophylline-fast the drug should be discontinued.

► Oxygen decreases the extreme respiratory efforts of the patient. An oxygen tent, B.L.B. mask, or nasal catheter may be used. A mixture of 80% helium and 20% oxygen may be employed.

► Sedation with status asthmaticus is best achieved with demerol, which apparently also causes some bronchodilation. For adults, the initial intramuscular dose must never exceed 50

* The management of status asthmaticus. Journal-Lancet 69:201-204, 1949.

mg. This amount may be given every six or eight hours and, if necessary, increased to 75 or, rarely, 100 mg. The drug should not be continued beyond three to five days. In children, 1.5 mg. per kilogram of body weight is used.

Drastic use of sedation in an exhausted patient may be disastrous. Morphine and other opiates should never be used because of risk of depressing breathing and cough reflex.

► Expectorants to loosen bronchial secretions are helpful; 10 to 15 drops of a saturated solution of potassium iodide may be administered four times daily.

► Manual elevation of the diaphragm helps counteract the physiologic pulmonary emphysema due to trapped air and may be performed three or four times daily. The palm of either hand is placed under the ribs on one side and pushed upward and inward during the latter half of expiration. This maneuver is repeated on the other side of the chest.

► Bronchoscopy, in skilled hands, may occasionally be necessary to prevent asphyxia. Inspissated bronchial plugs are removed by bronchoscope.

► Antibiotics are valuable to check the bronchial infection which often precipitates bronchial asthma into status asthmaticus. With a nebulizer, 50,000 units of penicillin in 1 cc. of distilled water, to which is added 3 or 4 drops of glycerin, is inhaled every three hours. One dose is omitted during the night. A daily injection of 300,000 units of long-acting penicillin is given intramuscularly.

► Antihistaminic drugs tend to cause inspissated mucous plug formation in the bronchi and are therefore contraindicated.

MODIFIED PROTAMINE INSULIN, designated as NPH-50, can be given before breakfast in a single daily dose to replace separate injections of unmodified and globin or protamine zinc insulin. Hyperglycemia and glycosuria are as well or better controlled than by the combination dosage, report A. J. Gabriele, M.D., and Alexander Marble, M.D., of New England Deaconess Hospital, Boston. Action continues at least twenty-four hours and probably twenty-eight or thirty, with greatest effect during late afternoon, evening, and night. To prevent hypoglycemic reactions, some carbohydrate is shifted from breakfast to afternoon and bedtime lunches.

Am. J. Digest. Dis. 16:197-206, 1949.

TETANUS IMMUNITY is adequate five days after 0.5 cc. of alum-precipitated toxoid is injected, if the last basic or booster dose was given four to six years earlier. However, Henry W. Baird III, M.D., of Yale University, New Haven, Conn., believes that if the wound favors production of toxin in very large amounts a booster dose only, immediately after injury, may not be sufficient.

Yale J. Biol. & Med. 21:385-390, 1949.

Mineral Oil Pneumonitis

LOUIS SCHNEIDER, M.D.*
Columbia University, New York City

WHEN mineral oil is used continuously as a laxative, minute amounts may spill into the lungs and in time produce chronic pneumonitis.

The most serious danger is that a pulmonary condition due to oil deposit will be mistaken for cancer. Early pulmonary infiltration disappears if use of the laxative is discontinued, but advanced changes may be permanent and resistant complicating infection sometimes requires surgery.

Four of 7 cases described by Louis Schneider, M.D., were discovered in routine surveys for tuberculosis. Patients were all elderly and appeared healthy.

Respiratory symptoms are absent in the beginning phase, and even with long involvement surprisingly few develop. Acute pneumonia may occur again and again, yet bronchiectasis and suppuration are uncommon.

As the pulmonary reaction increases, imposing roentgen shadows appear, with dyspnea on exertion and hacking cough. These signs may be attributed to carcinoma or arteriosclerotic heart disease, particularly in elderly patients. In spite of definite roentgenographic densities, percussion and auscultation may elicit few signs.

Chest films at first show nothing or merely prominent markings. As oil continues to enter the lungs, a small basal infiltration suggesting bronchopneumonia is noted. The process may resemble the fine deposit of radiopaque oil left by bronchography.

Infiltrations gradually fuse into an ill-defined area of ground-glass density. No atelectasis or hilar adenopathy is observed. By fluoroscopic examination, both leaves of the diaphragm move freely; heart and mediastinum have the usual position. Occasionally the lesion is a circumscribed, uniformly dense mass surrounded by a concentric fibrotic ring, called paraffinoma.

As long as the oil is used, proliferative lesions slowly spread, ultimately involving both lung fields. Sudden roentgen improvement probably indicates recovery from acute infectious pneumonitis. Although minor lesions disappear, large involved areas show very little change for years after the laxative is stopped.

Oil pneumonitis depends on the fact that mineral oil remains in alveoli indefinitely. Oil droplets are found in sputum, appearing as grease spots on cigaret paper laid on the surface of slides, and staining with scarlet red. Material containing oil may also be obtained from the lung by needle biopsy.

The chief remedy for aspiration fibrosis is to remove the cause. A Zenker diverticulum acting as an oil

* Pulmonary hazard of the ingestion of mineral oil in the apparently healthy adult. New England J. Med. 240:284-291, 1949.

reservoir should receive attention. Lobectomy may be done for pulmonary suppuration, bronchiectasis, or recurrent attacks of bronchopneumonia.

When a nondescript shadow is noted in the lung base of an otherwise healthy adult, inquiry should be made as to whether he has been taking mineral oil.

Blood Donors for Small Hospitals

THOMAS H. SELDON, M.D.*

A LARGE, fully stocked community blood bank is not usually necessary. Hospital needs can be met if proper use is made of blood donors, particularly professional ones.

Thomas H. Seldon, M.D., of the Mayo Clinic, Rochester, Minn., observes that persons volunteer more readily for blood donation when financial gain rather than only charity is involved. Once assured that repeated withdrawals will not impair health, many are willing to sell blood regularly and soon begin to count on the extra income derived thereby.

The supervisor of a small hospital blood bank gets friendly cooperation from nearby employers if definite appointment times are made and kept for employee donors. Twenty-four-hour notice is given so that appointments will not seriously interrupt work.

Professional donors are examined before the first blood withdrawal and after every fourth donation. Hemoglobin concentration is estimated each time and must be at least 80%; regular serologic tests are made for syphilis. After each withdrawal, ferrous sulfate tablets are supplied.

Replacement donors give blood in return for that already used by friends or relatives or as credit against future transfusions. Blood should be accepted on a bottle-for-bottle basis and no profit be realized by the hospital from the sale. Expenses of collection are added to the cost of transfusions.

Members of religious or fraternal groups sometimes organize to sell blood and give the proceeds to their organizations.

Occasional donors do not require physical examination, but must satisfactorily answer questions concerning malaria, malarial treatment, or residence in malarial zones; undulant fever, jaundice or jaundiced babies; asthma, hay fever, allergies; fainting; abortions or pregnancies; condition of heart, lungs, and blood; and whether a doctor has recently been consulted.

* Procurement and care of blood donors for small hospitals. Current Researches in Anesth. & Analg. 28:111-115, 1949.

Ocular Sarcoidosis

ALAN C. WOODS, M.D.*
Johns Hopkins University, Baltimore

ANY nodular lesion of the eye or adnexa, especially granulomatous uveitis, should suggest sarcoidosis.

The disease is far more common than once believed and eyes are affected in nearly half the cases, finds Alan C. Woods, M.D. The ophthalmologist is often the first physician consulted.

Though theoretically benign, sarcoid tubercles can wreck the natural defense against tuberculosis, produce cataract and glaucoma, or destroy sight.

Uveoparotid fever and the Mikulicz' syndrome with or without uveitis are manifestations of sarcoidosis. Sarcoid lesions have been noted in all eye structures except fibrous coats. Of 43 ocular cases, 28 involved the uveal tract, 9 the lacrimal gland, 7 the lids, and 6 the conjunctiva.

The cause of sarcoidosis is uncertain. Epithelioid cell tubercles most often occupy the lungs, lymph nodes, eyes, skin, spleen, and liver but may invade any organ or tissue.

The course is usually chronic and constitutional manifestation absent, though acute malaise and fever may occur or symptoms arise from mechanical interference with function. Diagnostic aids include rise in serum globulin, anergy to huge doses of tuberculin, and microscopic appearance of a lymph gland or sarcoid nodule. Many therapeutic agents have failed, yet spontaneous recovery is possible.

Eyelids may display the millet seed tubercles often noted elsewhere on the skin. Free subcutaneous nodules resembling small chalazia sometimes develop.

Lacrimal gland sarcoid is a painless swelling in the outer upper portion of one or both orbits. The gland feels slightly nodular, elastic, and firm. As a rule submaxillary, salivary, and cervical lymph glands are also involved and at times the parotids. Uveitis and Mikulicz' syndrome may occur.

Conjunctivae are only occasionally affected. Small nodules or large follicles scatter irregularly over the palpebral surface or rounded outgrowths form pseudo-granulation tissue. Calcareous deposits have been seen.

The *episclera* may contain yellowish red nodules with the color of an inflamed pinguecula. The overlying conjunctiva is freely movable.

In the *cornea,* changes are often associated with uveal sarcoid but are degenerative and not true epithelioid lesions. The lower part is most often involved and band keratitis may occur. The *sclera* is never affected.

The most frequent and serious of all ocular sarcoid disorders, nodular iritis, appears in the *uveal tract.* Though resembling tuberculous miliary lesions, the growths are larger, pinker, less regular, and more vascular. Mutton-fat keratic precipitates

* Sarcoidosis: the systemic and ocular manifestations. Tr. Am. Acad. Ophth. 333-343, 1949.

are common and Koeppe forms appear at the periphery.

Sarcoid uveitis ordinarily causes no pain and only slight inflammatory symptoms. In a few cases the iris is veiled by heavy exudate and the parotid gland swells, while fever, lassitude, and vague gastrointestinal or cerebral symptoms develop. Iritis is usually chronic, with minor remissions and exacerbations. Nodules may hyalinize or disappear, leaving only small areas of fibrosis.

Choroid sarcoidosis is infrequent. In the active stage, deep yellowish nodules are observed.

The *retina* is not often a site of lesions. However, the optic nerve may be entangled in a sarcoid mass or periphlebitis develop.

Substernal Goiter and Alveolar Ectasia

EDWARD PHILLIPS, M.D., AND SAMUEL A. LEVINE, M.D.*

THE possibility of tracheal compression from an undiagnosed mediastinal goiter should be considered when symptoms of pulmonary emphysema appear in a patient with goiter or hyperthyroidism.

When compression is slight, alveolar ectasia may develop gradually and insidiously over many years. Chronic cough, dyspnea, and wheezing are the main respiratory symptoms.

Other signs which should direct attention toward the condition are the patient's suffused face, prolongation of expiration, and increased anteroposterior chest diameter. Fluoroscopy and lateral and oblique roentgenograms are sometimes necessary to visualize the mediastinal mass and tracheal compression.

Among 13 patients with substernal goiter and pulmonary emphysema, described by Edward Phillips, M.D., Los Angeles, and Samuel A. Levine, M.D., of Harvard University, Boston, 10 also had hyperthyroidism; in 8 of the 10 the disease was of the masked variety without significant enlargement of the thyroid gland in the neck, and both the thyrotoxicosis and the mediastinal mass had been overlooked.

The degree of improvement of respiratory symptoms following surgery depends largely on the duration of the obstruction. No improvement occurred among the 4 patients who had had respiratory symptoms for five to twenty years. Complete cures took place in only 2 patients; symptoms in these cases had been present for three and eighteen months respectively.

Treatment with antithyroid substances or radioactive iodine is not indicated with mechanical interference of the trachea. The goiter should be removed surgically to prevent or arrest irreversible, progressive bronchopulmonary disease.

* Substernal goiter and pulmonary emphysema. California Med. 70:394-397, 1949.

Tuberculosis of Bones and Joints

CLARENCE A. RYAN, M.D.*
Vancouver, British Columbia

DECISION for surgical treatment of tuberculous bones and joints is influenced by age of the patient, site and extent of the lesion, and function of the affected part.

Disease in a young child or in synovial membrane alone may heal spontaneously with long rest and immobilization. Clarence A. Ryan, M.D., usually advises fusion for wage-earning adults and often for older children, especially if a weight-bearing joint is involved. Small bones are sometimes removed.

Tuberculosis will become worse for the first four to six months after onset, until antibody defense is built up. During this time good food, fresh air, sunlight, and bed rest are essential. Diasone is helpful in 80% of cases.

Traction is used to separate painful joint surfaces and limit synovial infection.

During childhood affected parts will either heal or be protected until a suitable age for operation. If only the synovium is involved, two or three years of conservative care may result in good function, but careful observation must be continued for at least three years after apparent arrest.

Tuberculosis of the spine—Fusion is almost invariably done to prevent increasing deformity and spread of tuberculosis. Since long preoperative recumbency is impossible for adults, surgery is usually done when infection becomes quiescent. Postoperatively three or four months of bed rest are required, then a Taylor brace is worn until fusion is solid.

Spondylitis is the most frequent form of bone tuberculosis in children under five years. If infection subsides, fusion can be done after the age of four years, though shock is less with delay. A Whitman or Bradford frame is utilized until spinal flexion is corrected and disease inactive. A plaster of paris cast is then worn and, when bone recalcifies, a Taylor brace for at least two years more.

Paralysis may develop but is usually due to edema or abscess and seldom requires laminectomy. The Albee type of fusion is preferred for young children or persons in poor physical condition, and in other cases combined Hibbs and Albee technics.

Tuberculosis of upper extremities—The shoulder joint is infected chiefly in adult life and caries sicca predominates. Bone loss is slight and fibrosis soon occurs. A sling support is sufficient during the acute stage and the shoulder is then fused.

An elbow which does not heal spontaneously should be resected. Should flail joint result, external support can be given with a leather cuff and side iron braces. If fusion is eventually necessary, humeral condyles, radiohumeral articulation, and olecranon fossa are denuded of cartilage, and

* Tuberculosis of bones and joints. J. Internat. Coll. Surgeons 12:36-44, 1949.

olecranon and humerus are bridged with a bone graft.

In wrist and bones of a child, tuberculosis remains localized and often heals completely. Adults usually have widespread involvement including the radiocarpal articulation, and arthrodesis is required.

Dactylitis rapidly extends over the entire bone. Unless infection subsides soon, the metacarpal, phalanx, or entire finger should be removed. The wrist is then immobilized in 45° dorsiflexion for five months.

Tuberculosis of lower extremities—Sacroiliac tuberculosis is almost entirely confined to adults. Infection tends to burrow forward and an abscess may rupture into the rectum; since nothing is gained by conservative treatment, fusion should be done early. All pus is evacuated and the cavity scraped. An iliac graft is inserted into a gutter behind and above the joint, or the joint space is destroyed by curettage.

Children have 85% of all tuberculous hip lesions. Synovitis precedes actual bone involvement and at this stage conservative treatment may be sufficient. After the age of six years, arthrodesis may be done by the method of Hibbs, Wilson, Ghormley, or Albee. Abscess is not a contraindication. The joint should be held in 160° extension and 20° abduction.

Tuberculosis should be suspected in any persistently hydropic knee, even after recent injury. Fusion will be necessary for practically all but purely synovial cases. To protect the growth center, operation should be delayed until the age of ten or twelve years.

A tibial or patellar graft into the femur may be used. A child's knee is fixed in full extension, an adult's at 160°.

Tuberculosis below the ankle tends to spread and resection or excision of bones and even amputation of the foot may be necessary, especially in adults. A child may recover ankle function after removal of the astragalus although the leg is shortened.

ADEQUATE POSTOPERATIVE RATION for the patient unable to take food by mouth is provided by a mixture of ossein gelatin, hydrolyzed protein, and glucose. Vitamin C, B_1, and some of the other B vitamins are given parenterally and sodium chloride is administered according to the needs of the patient. The nitrogen requirement, 0.3 gm. per kilogram per day, is met by equal amounts of gelatin and hydrolysate. Glucose is added to give the necessary number of calories, 30 per kilogram per day. The protein hydrolysate, gelatin, and glucose are mixed in the desired proportions and given by vein in 3,000 to 3,500 cc. of water. Use of the macromolecular gelatin, asserts Cecilia Riegel, Ph.D., and associates of the University of Pennsylvania, Philadelphia, makes possible a solution less hypertonic than when the nitrogen is supplied entirely by casein or fibrin hydrolysate.

Surgery 25:672-675, 1949.

New Technics of Total Gastrectomy

OWEN H. WANGENSTEEN, M.D.*
University of Minnesota, Minneapolis

THE death rate from total gastrectomy need not be excessively higher than that from partial resection. Three technical procedures incorporated in performance of total gastrectomy by Owen H. Wangensteen, M.D., assure good healing.

Fixation of the jejunum against the posterior wall of the esophagus permits complete enclosure of the esophagojejunal anastomosis in a firm ensheathing cylinder of supporting tissues when the subdiaphragmatic esophagus is sutured down upon the jejunum anteriorly.

Suction drainage of the operative area keeps tissue dry and removes corrosive pancreatic juice.

Simultaneous upper mesenteric ganglionectomy will annul the painful effect of small bowel distention and increase capacity for food.

The major steps of total gastrectomy are:

1] Removal of the stomach with parts of esophagus and duodenum

2] Excision of greater omentum, the gastrohepatic omentum up to the porta hepatis, and the spleen

3] Inversion of the duodenal stump

4] Retrocolic anastomosis of esophagus with jejunum and an opening between jejunal limbs

5] Placement of suction drain in splenic bed

The mesenteric border of jejunum is fastened against the posterior esophageal wall by six to eight silk sutures 32 in. long with a 10-in. needle holder. The first suture catches the esophagus just under the diaphragm; the second row is placed between the first line of stitches and the clamp (Fig. 1*a*).

The jejunum is opened, the posterior gullet wall divided behind the clamp, and sutures made (Fig. 1*b*). The clamp, which has served as a tractor, is then cut away by dividing the anterior wall (Fig. 1*c*). Jejunal mucosa is trimmed (Fig. 1*d*), and the anterior row of sutures inserted (Fig. 1*e*). By just failing to pierce the mucosa, the stitches allow inversion with a single row.

The anterior peritoneal flap is then carefully brought down to surround the anastomosis completely.

An opening is made between ascending and descending jejunal limbs, and the anastomosis fastened beneath the slit in the transverse mesocolon (Fig. 2*a*). The inlying duodenal tube is threaded through the opening into the proximal duodenojejunal loop and left in place three days.

After splenectomy, the mesenteric vessels are easily approached. The pancreas is displaced to the right with aid of a few snips in the mesocolon. The superior mesenteric artery is cleared of nerve fibers and adventitious tissue for at least 3 cm. at the root, and the aortic site of origin is also stripped.

* Technical suggestions in the performance of total gastrectomy. Surgery 25:766-775, 1949.

TECHNIC OF ESOPHAGOJEJUNAL ANASTOMOSIS

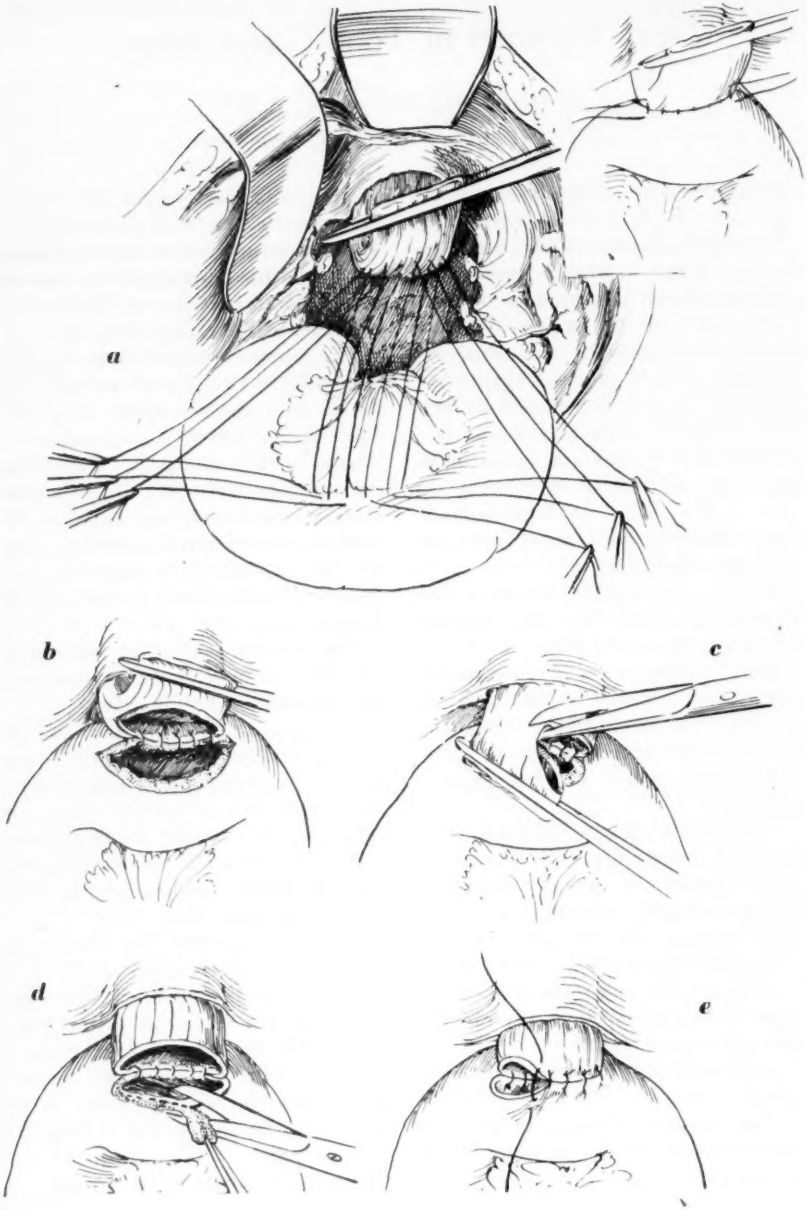


Figure 1

FIXATION OF COMPLETED ANASTOMOSIS

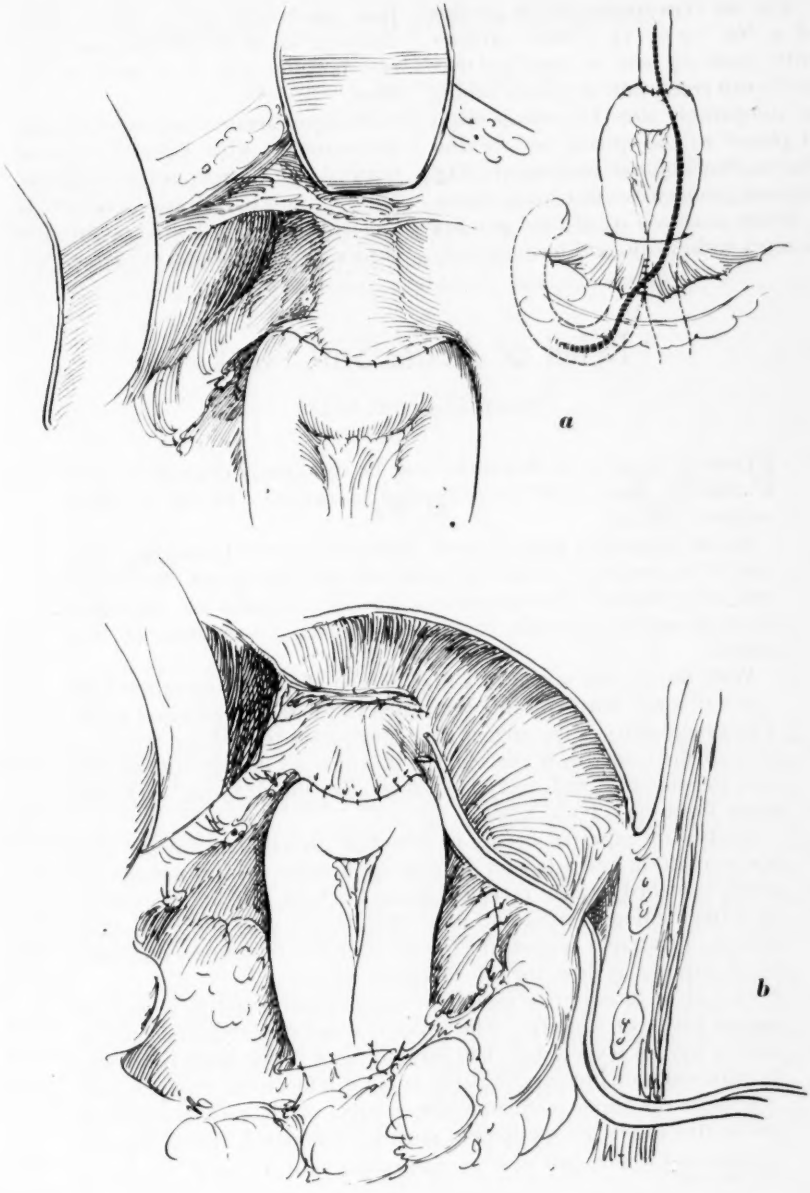


Figure 2

The air vent suction drain consists of a No. 10 or 12 French catheter with open tip and an attached No. 22 French rectal tube or plastic tubing of comparable size. The sump drain is placed in the splenic bed behind the esophagojejunal anastomosis (Fig. 2*b*) and connected with a small motor.

From 70 to 300 cc. of fluid per day is often withdrawn, and in some cases pure pancreatic juice. The suction drainage has shortened the postoperative hospital stay to a week or ten days.

In approximately two years 28 total gastrectomies with posterior jejunal buttress have been done by 8 surgeons. Only 1 hospital death occurred, a mortality of 3.5%. Until recently few clinics have had rates under 30%.

Relief of Acute Stiff Neck

JANET TRAVELL, M.D.*

PAINFUL spasm of neck muscles may be completely relaxed by ethyl chloride spray. The gas is applied in rhythmic sweeps to avoid extreme chilling.

Before treatment Janet Travell, M.D., of Cornell University, New York City, palpates muscles of neck and shoulder girdle for trigger areas of tenderness. The trapezius and levator scapulae are commonly involved and occasionally the splenius cervicis, sternomastoid, and scaleni.

With the patient seated in a high-backed chair and container held 1 or 2 ft. away, ethyl chloride is directed to the skin at an acute angle. The sweep starts at the trigger zone and moves toward the reference zone. If the trapezius is affected, the spray passes inward and upward over the shoulder and neck; for the levator scapulae, out, back, and down from the cervical angle.

Strokes are repeated evenly in the same direction in rhythm of a few seconds on and a few off. During application painful muscles are gently stretched by light pressure against the head, and in the intervals by active motion of head and neck. Manipulation should cause little distress. Treatment is continued until pain and tenderness disappear or, if response is slow, for ten to fifteen minutes.

In 9 of 12 cases only 1 treatment was necessary, and in several instances just 2 or 3 sweeps. The spray is sometimes required once or twice a day for several days. Chronic stiff neck is not easily controlled by ethyl chloride but may be cured by local infiltration with procaine.

Because the vapor is inflammable, sources of fire such as cigarettes and sparks in electric equipment must be eliminated during therapy.

* Rapid relief of acute "stiff neck" by ethyl chloride spray. J. Am. M. Women's A. 4:89-95, 1949.

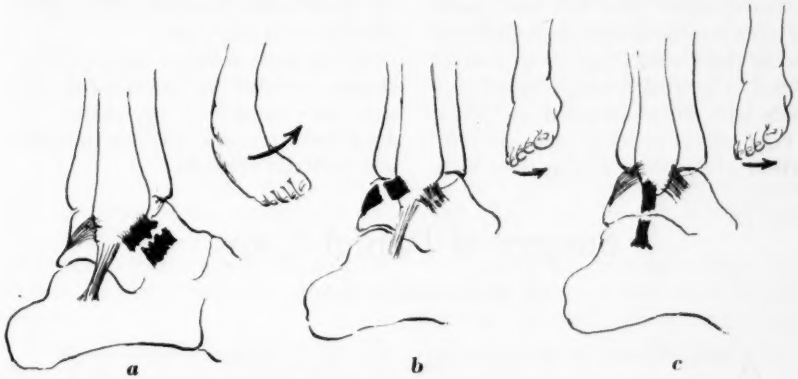
Injuries of Lateral Ankle Ligaments

MORTON H. LEONARD, M.D.*
El Paso City-County Hospital, Tex.

A BADLY sprained ankle should be examined with great care for signs of reduced subluxation. Ligaments ruptured by inversion are often insufficiently treated by procaine infiltration and strapping with the result that function returns very slowly and occasionally not at all. Plaster immobilization should not be unduly prolonged.

Morton H. Leonard, M.D., compares the injured and uninjured ankles by radiography with forced inversion.

Joint tenderness in front of the fibula indicates damage to the talofibular ligament (Fig. *a*) and films should be exposed in equinus position to show displacement. Pain behind the fibula probably means posterior rupture (Fig. *b*), best shown by inversion with the ankle at 90°. With rupture of the calcaneofibular ligament (Fig. *c*), the tibiotalar relationships remain practically unchanged and the ankle is stable in equinus.



a *b* *c*

As a rule, the calcaneofibular ligament is considered to be the most essential and most often injured. With the foot at a 90° angle with the leg, this ligament is perpendicular and therefore easily torn by inversion, while the anterior talofibular ligament remains parallel to the long axis of the talus and is not vulnerable.

But ankle inversion commonly occurs with the foot in plantar flexion, on high heels or in the act of walking. The calcaneofibular ligament is then parallel to the talus, the anterior talofibular at right angles and more likely to be strained.

* Injuries of the lateral ligaments of the ankle. J. Bone & Joint Surg. 31-A:373-377, 1949.

When the condition is diagnosed as subluxation, the ankle is encased in a skin-tight walking plaster. A close fit should be maintained by changing the cast in about three weeks, when swelling subsides and muscles atrophy. With the cast the patient can walk easily and even dance or bowl.

After bruises and tenderness disappear the plaster is removed, usually in about six weeks. In a few cases immobilization is continued for a week or two longer. The foot and ankle are then wrapped with elastoplast for two or three weeks, largely to control edema. The final roentgenograms are made with ankle inverted as before.

Poor effects of local procaine infiltration and adhesive strapping were discovered among 51 college students with inversion sprain. Ankles of nearly half appeared stable and so were not encased in plaster.

In 7 patients, however, pain over the anterior talofibular ligament, swelling, and insecurity continued for two to five months throughout the period of observation. Because of previous inadequate treatment a few ankles were grossly unstable and injury had recurred. Traumatic arthritis was noted in one man who had repeatedly sprained the joint.

Ankles of 23 students appeared obviously unstable by roentgenography and were protected by plaster, as described. In every instance function was perfectly restored.

Surgery of Painful Corns

E. A. LeCocq, M.D.*

A PERSISTENTLY painful corn may be cured without deformity by removing some but not all bone from the affected toe. E. A. LeCocq, M.D., of the University of Washington, Seattle, leaves the base of proximal phalanx, tip of distal phalanx, and all soft tissue.

Clavus results from intermittent pressure on the bony prominence of an interphalangeal joint. Even large shoes may cause friction and give no help. Excision of the corn alone produces a dense scar adherent to bone and far more distressing than the original callus. Amputation of the toe, the usual remedy, is especially disliked by women, who comprise at least 90% of patients with corns.

But removal of pressure by the resection of the bones of toe is uniformly successful. Subtotal phalangectomy was done 44 times for 23 persons with hard and soft corns and overlapping digits.

Without use of a tourniquet, an anterolateral incision is made. Bones are dissected close to the periosteum and wide excursions into soft tissue are avoided. The defect is packed with oxycel cotton and the wound closed with a silk surture including only the skin. A loose bandage is applied. No walking is allowed until tissues are healed.

* Subtotal phalangectomy for relief of painful clavus. Northwest Med. 48:398-399. 1949.

Acute Proctologic Conditions

EMIL GRANET, M.D.*
Columbia University, New York City

PAINFUL anorectal lesions can usually be relieved in the general practitioner's office.

Most common are hemorrhoids, anal fissure, abscess, coccygodynia, venereal proctitis, and impacted feces. Promptly applied measures outlined by Emil Granet, M.D., may prevent incurable complications.

EXAMINATION

The left lateral Sims position is the most relaxing. As the perianal skin is retracted bilaterally, the patient should bear down to extrude the anal verge. Hemorrhoids, fissures, or abscess may be revealed by this procedure.

Spasm is overcome by pressure on the anal verge. As the sphincters open, the finger enters the rectum without causing pain. Tissues are gently compressed between the index finger in the rectum and the thumb on the outside, then the upper rectum is palpated.

Supralevator and perirectal abscesses and about 50% of colonic cancers are within reach.

HEMORRHOIDS

A solitary large external hemorrhoid a day or two old should be excised. Overlying skin is clamped and cut, the vein everted, clamped, and removed. Bleeding usually stops when the clamp is left in place for two minutes and the open wound then packed with a small sliver of oxycel or other hemostatic packing.

Small or partly resolved external thrombi require only wet dressings and a daily warm enema to prevent straining at stool. During hours of rest a large cotton compress, soaked in equal parts of witch hazel and water is held in place by a belt and perineal pad.

Prolapsed internal hemorrhoids on one side may be ligated in the early stage. The anus is not dilated and no clamps are used.

A sloughing, bleeding mass surrounding the anus requires complete bed rest with bed elevated at the foot. Wet dressings and sedation are used for a week.

For cases with extensive sloughing 300,000 units of penicillin and 1 gm. of streptomycin are given daily for several days.

Even so, resolution of the condition usually requires ten days to three weeks. Recurrence should be prevented by hemorrhoidectomy.

ANAL FISSURE

A fresh anal tear is examined under anesthesia with 10% cocaine solution or procaine powder placed in the wound. The fissure will heal if spasm is relieved by prolonged local anesthesia.

For a posterior lesion 5 cc. of 1%

* The treatment of acute proctologic conditions. Am. Pract. 3:533-538, 1949.

procaine solution is injected into perianal skin, and 5 cc. into sphincter muscles in the posterior quadrant. About 3 cc. of 0.5% aqueous diothane solution is injected under and around the fissure and 7 cc. into sphincter muscles behind and beside the lesion. Warm sitz baths or anal douches and low rectal irrigations are employed for several days.

Owing to fibrosis and infection, chronic anal fissure cannot heal and must be removed completely by radical excision.

ABSCESS

Acute inflammation of anal crypts, ducts, and glands may be relieved by sitz baths, douches, and enemas. Spasm is reduced by an anesthetic ointment deposited in the anal canal with a pile pipe several times daily. Penicillin and streptomycin should be given.

Well-established infralevator abscess should be drained from stem to stern, including the source of infection in crypt, tubule, or intramuscular gland. If the hospital entry must be delayed, a stab incision is made. The fistula may be excised a few weeks later.

PILONIDAL CYST

Infected pilonidal cyst also subsides after prompt incision and drainage. Ethyl chloride sprayed over the point of greatest fluctuation affords adequate anesthesia. Within a day or two the cavity should be unroofed and saucerized by Buie's technic.

COCCYGODYNIA

Painful spasm of the paracoccygeal muscles with or without bursitis may result from a fall, childbirth, or anorectal operation. Severe throbbing pain frequently radiates into the rectum, buttocks, or thighs. Symptoms are often relieved in a few days by massage and heat.

With a finger in the rectum, levator ani and coccygeus muscles are stroked for two minutes on each side. Shortwave diathermy with low heat is then applied to the sacral region for fifteen minutes. Treatments are given on alternate days four to six times, then at longer intervals.

ANORECTAL VENEREAL DISEASE

Lymphopathia venereum causes acute proctitis extending a considerable distance into the rectum. Under treatment with sulfadiazine or aureomycin most lesions resolve without stricture.

Gonorrheal proctitis, a similar but less severe condition, is quickly checked by penicillin.

Anal ulcers of primary syphilis are generally mistaken for simple fissure. Inguinal nodes are usually enlarged, and darkfield inspection discloses spirochetes from lesion or gland. Penicillin should be given in all suspected cases of syphilis.

FECAL IMPACTION

Feces tend to accumulate after barium roentgenography and in senile, bedridden, or depressed psychotic individuals. The mass can be broken up and partly removed by the finger. A retention enema of mineral oil is then given and eight hours later repeated injections of soap and water. Recurrence is prevented by a low residue diet, a daily aperient, and enemas at need.

Postpartum Exercises

LT. WILLIE REBECCA HARVEY, WMSC*
Station Hospital, Fort George G. Meade, Md.

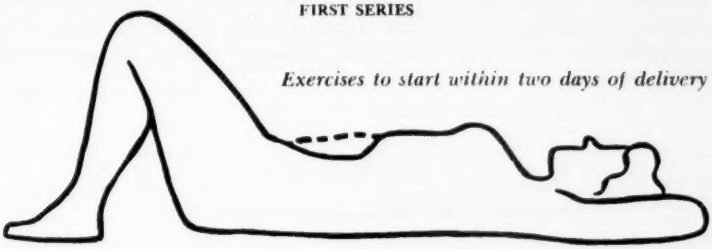
CHRONIC low backache, a frequent result of poor posture during pregnancy, may be prevented or relieved by postpartum exercise. The plan suggested by Lt. Willie Rebecca Harvey, WMSC, strengthens pelvic and abdominal muscles and corrects lordosis. Exercises are done for fifteen minutes daily.

Multiparas should start the first series of exercises twenty-four hours after delivery, primiparas within forty-eight. Practice is supervised in the hospital and continued at home for six weeks.

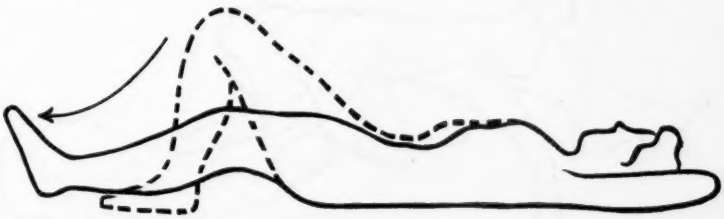
The second series of exercises is then begun and repeated until posture is satisfactory. The knee-chest position is too passive for good effect and leg raising too strenuous.

FIRST SERIES

Exercises to start within two days of delivery



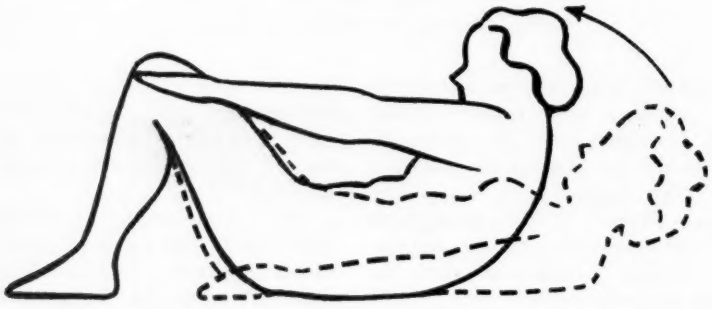
Breathing—Lie on back, knees bent. Inhale slowly, expanding chest and abdomen. Exhale with abdominal muscles, holding chest up, inhale, exhale, relax; repeat 10 times.



Pelvic tilt—Lie on back, knees bent. Pull abdomen in, roll pelvis back with lower back pressed to floor. Hold, relax, repeat. Extend knees halfway and repeat pelvic tilt, extend knees fully and repeat. Exercise 10 times in each position.

* The need for physical therapy in postpartum care. Physical Therap. Rev. 29:206-217, 1949.

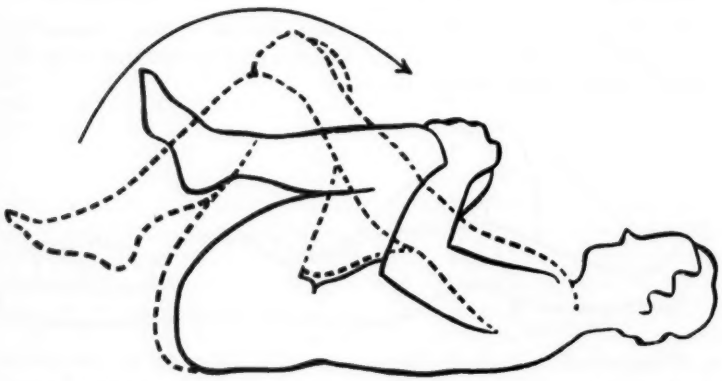
Gluteal setting—Lie flat on back, squeeze buttocks together, tightening large muscles of seat and pelvic muscles as if checking a bowel movement, relax. Repeat 25 times.



Abdominal exercise—Lie on back, knees bent. With chin held in, lift head as far off floor as possible, slowly lower. Repeat with arms reaching forward and shoulders raised. Try to raise entire back, with shoulders not over 12 in. from floor. Increase number of repetitions with practice.

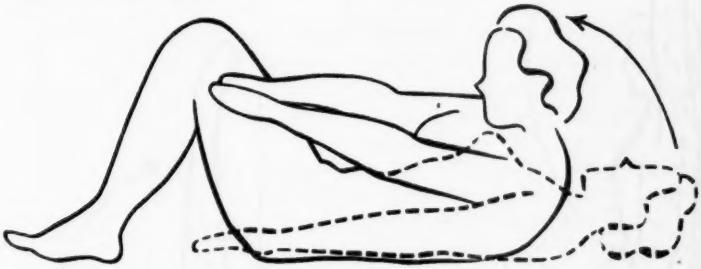
SECOND SERIES

Exercises to be started six weeks after delivery

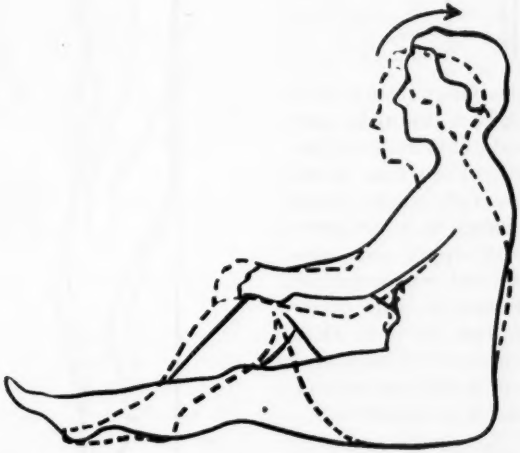


Back stretching—Lie on back, knees bent, arms extended, hands grasping knees, feet off floor. Bend arms and pull knees toward chest, relax. Repeat 6 to 10 times and try to touch chest with knees.

Abdominal exercise—Lie on back, knees bent, feet flat on floor, arms extended at sides. Slowly reach forward toward the knees, raise head and shoulders. Try to raise shoulders 10 or 12 in. from floor, slowly lower back to position. When able to repeat several times without much effort, do same exercise with hands behind neck. Increase number of repetitions.



Trunk rotation—Lie on back, knees bent. Raise head and shoulders 10 to 12 in., reach forward with both hands beside one knee. Repeat, reaching toward other knee. Advance to same motions with hands behind neck.

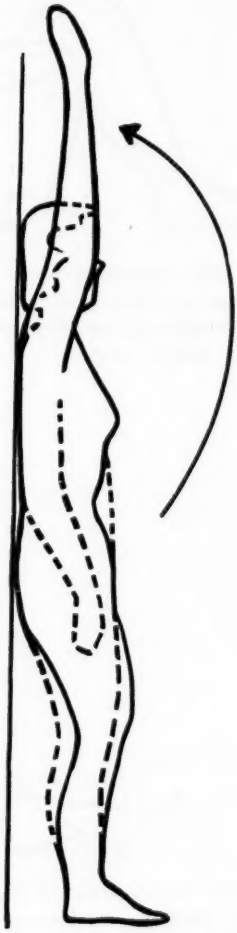


Back exercise—Sit on floor with each hand grasping a bent knee. Using back muscles, stretch up toward ceiling with abdomen pulled in and shoulders loose. Do the same with one leg, then the other, on floor and both hands around opposite knee.

General posture—Sit on stool placed against wall, with back, buttocks, and head touching wall, chin in. Feet flat on floor, knees bent, so that knees and thigh make a right angle. Arms at sides. Pull abdomen in, press lower back to wall with upper part also in contact. Relax and repeat several times. Pull abdomen in, roll pelvis back, press low back to wall, raise arms, try to touch ears. If back leaves wall, raise arms only high enough to keep contact but try to improve.

Note—Keep making an effort to pull in abdominal muscles when standing or walking.

Progress in posture—Repeat general posture routine while standing with back against wall and heels about 2 in. from the wall. Pull abdomen in, press lower back against wall with arms hanging. Raise and lower arms.



REPRINTS OF THIS ABSTRACT are available upon request. Write to Editor, MODERN MEDICINE, 84 South 10 St., Minneapolis 3, Minn.

Infusion Set for Infants

MACK SUTTON, M.D.*
Phoebe Putney Hospital, Albany, Ga.

A SIMPLE compact apparatus that fits readily into a physician's bag is well adapted to infusions and transfusions of infants either at home or in the office.

The device, which has been employed in over 1,000 procedures, including more than 300 bone marrow transfusions, by the staff of Tulane University and by private practitioners, is convenient for administration of whole blood, concentrated plasma, or

washed maternal cells, reports Mack Sutton, M.D.*

Shock and erythroblastosis in infants and massive obstetric hemorrhage are among the conditions treated. The doctor does not require expert assistance and much of the time has one hand free.

The assembly consists of a 23- or 24-gauge short bevel needle 4 cm. long, continuous flow automatic valve, Hoffman clamp, 5-cc. Luer-Lok syringe, 150 cm. of thin transparent rubber tubing, special sleeve type of bottle stopper, pyrex straight-tube connection, and the proximal 20 cm. of a No. 18 French rubber catheter.

The circuit is primed and pump tested with physiologic saline or 5% glucose solution and the catheter inserted in the infusion bottle. The operator sits, holding the loaded syringe in right hand.

The needle is generally introduced into the superficial temporal vein of the scalp (see illustration), basilic or median cubital vein of the arm, or dorsal metacarpal vein of the hand. The needle is held down with the left middle finger and the Hoffman clamp on the needle hub firmly grasped with thumb and index finger.

Push-pull action on the plunger assures a steady flow, and continuous pressure keeps the rubber T-valve closed. The total amount of any fluid given infants should be 22 cc. per kilogram of body weight, or roughly one-fourth the total blood volume, and the rate of flow should not exceed 10 cc. per minute.

For change to continuous drip, the assembly is disconnected at the needle hub and the needle attached to a drip infusion set by a light B-D adapter of Luer-Lok type.

The Hoffman clamp is used for a needle-taping anchor; 1.5 cm. of con-

* A simplified infusion set for infants. Pediatrics 3:423-428, 1949.

tinuous traction tape may be applied over adhesive tape.

The contents of standard transfusion sets can be shifted to the assembly.

Replacement transfusion is given with two sets working simultaneously, one in vein for blood replacement, the other in the umbilical vein for blood removal.

ACQUIRED UMBILICAL HERNIA IN INFANCY is best treated by perforated adhesive tape. Standard practice is to keep the protrusion taped until the hernial opening closes or surgical repair can be made. Advantages of perforated tape over plain adhesive, listed by Robert Cohen, M.D., of Studio City, Calif., are: slight skin irritation, allowing replacement of tape without lapse of time; firm fixation of the tape to the small patches of skin under the perforations; decreased incidence of bleeding; better ventilation, the perforations exposing more skin for aeration; and smaller area of irritation if the infant is allergic to the substance of the tape.

Am. J. Dis. Child. 76:44-45, 1948.

SUBCUTANEOUS PLASMA INFUSION is as efficacious as intravenous administration for restoration of tissue protein in infants and small children convalescing from debilitating disease. Infusion dangers are diminished and less specialized equipment and skill are required. Isa C. Grant, M.D., of the Medical College of Virginia, Richmond, and associates observed two groups of convalescent children, between nine and twenty-nine months of age. One group received plasma intravenously, the other subcutaneously. Hemoglobin, serum protein concentrations, and hematocrit determinations done before and after administration of plasma indicate that the plasma proteins pass readily into the blood by either route.

Virginia M. Monthly 76:182-185, 1949.

VITAMIN A ABSORPTION in the newborn is favored if the vitamin is given in an aqueous dispersion, report Albert E. Sobel, Ph.D., Lottie Besman, and Benjamin Kramer, M.D., of the Jewish Hospital, Brooklyn. Infants compared with children more than one year old have a diminished intestinal absorption of fats and higher values for fecal fat. With vitamin A in oil, vitamin absorption is diminished, but absorption curves may be brought to the proper level by administering the vitamin in an aqueous dispersion using 16% polyoxyethylene sorbitan monolaurate as the dispersing agent.

Am. J. Dis. Child. 77:576-591, 1949.

Peripheral Nerve Surgery

JOHN W. KIRKLIN, M.D., JOSEPH BERKSON, M.D.,
Mayo Clinic, Rochester, Minn.
FRANCIS MURPHEY, M.D.*
University of Tennessee, Memphis

RESULTS obtained by suture of severed peripheral nerves are influenced significantly by factors relating to the selection of patients, the location and extent of the injury, and the operative technic employed.

Recovery is most likely to be satisfactory if accurate end-to-end anastomosis of the nerve ends is performed within three months, preferably within one month, of the injury.

Motor function in large muscles is reasonably good following neurorrhaphy as late as nine months after the division. However, if the nerves supplying the small, distal muscles of the hands or feet are severed, early operation is required to restore function.

John W. Kirklin, M.D., Francis Murphey, M.D., and Joseph Berkson, M.D., find that although inferior results are to be anticipated if surgery is delayed more than nine months, nerve repair is still of some value as late as fifteen months after injury. Beyond this period some crude sensory function may be attained, but motor recovery is rare.

Sensory return varies with the nerve involved. Under the best of circumstances, sciatic nerve suture rarely restores normal tactile sensation. Crude sensation is regained in less than 20% of cases if sciatic nerve repair is done within nine months.

In contrast, nearly all neurorrhaphies of the median or ulnar nerves are followed by crude sensory return when performed within nine months. However, for restoration of discriminating sensory functions, surgery must be accomplished within the first three months.

The level of the nerve injury also affects the prognosis. In general, results are best in patients with distal injuries. Early repair is especially desirable in high-lying lesions.

The principal aim of the surgeon should be to attain an accurate end-to-end anastomosis of healthy nerve tissue. The functional result is not endangered by slight tension on the suture line, but glioma or neuroma in the sutured nerve ends diminishes the chances of recovery.

If a glioma or neuroma is present, the distal nerve end should be resected back until good funiculi are seen. If possible, the proximal end should also be cut beyond any neuroma. The resulting discrepancy can usually be overcome by careful but extensive mobilization. A large gap between nerve ends is no barrier to at least partial recovery of function if careful suturing is done.

Fine, unabsorbable suture material should be used. Silk, cotton, or steel

* Suture of peripheral nerves. Surg., Gynec. & Obst. 88:719-730, 1949.

or tantalum wire is suitable. At least a few radiopaque sutures should be used on the nerve endings so that subsequent roentgenograms will demonstrate any disruption of the anastomosis.

Wrapping the suture line with tantalum foil is unnecessary and may even be a hindrance, especially in small, distal muscles. Occasionally the tantalum cuff seems to constrict the nerve.

Distended Urinary Bladder

THEODOR HRYNTSCHAK, M.D., VIENNA*

SINCE delay in treatment of chronic vesical distention may be fatal, rapid decompression is preferable to gradual emptying. Most patients need large amounts of water to replenish dehydrated body tissues and aid excretion of nitrogenous waste by the kidney. A large fluid intake cannot be tolerated until the bladder has been emptied.

Harm from sudden vesical decompression may be avoided by keeping the bladder drained continuously for at least one week. If the inelastic decompressed bladder is not kept empty, kidneys are damaged by back pressure and inevitable infection. Renal hemorrhage, pyelonephritis, oliguria, anuria, and septicemia may result.

Theodor Hryntschak, M.D., of Städtische Poliklinik, Vienna, has used the following procedure for sixteen years with no ill effects attributable to the sudden decompression:

The patient is hospitalized, and a bilateral vasectomy is done to prevent epididymitis. A 17 or 18 Tiemann catheter is then inserted into the bladder and taped in place. The catheter is connected to a bottle containing antiseptic solution. By placing the bottle on the floor, a permanent slight suction is achieved and direct contact with air avoided.

An indwelling catheter eventually provokes urinary infection, which is controlled only by free urine outflow of 3,000 to 4,000 cc. daily.

If necessary, liquid ingestion is supplemented by physiologic salt solution with glucose, given subcutaneously, rectally, or, in severe cases with uremia and vomiting, intravenously. Careful observations are made for evidences of circulatory overload.

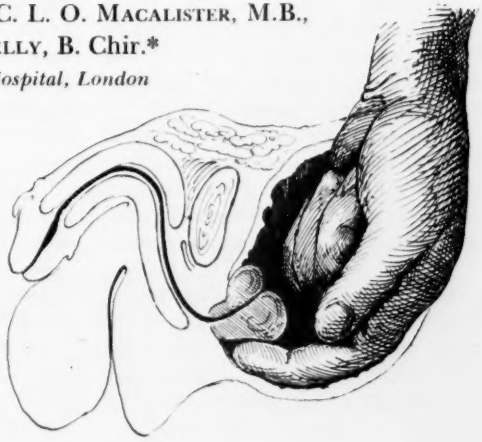
Unless obstructed by blood clots or displaced, the catheter is left in situ for five to seven days. By then renal function is usually sufficiently improved for treatment of infection with sulfonamides.

Submucous hemorrhages of the bladder, which may occur during the first few days following decompression, are soon stopped by 0.15-gm. papaverine hydrochloride suppositories three to four times a day.

* Sudden and complete decompression versus slow emptying of the distended urinary bladder. J. Urol. 61:545-549, 1949.

Retropubic Prostatectomy

TERENCE MILLIN, M.Ch., C. L. O. MACALISTER, M.B., AND P. M. KELLY, B. Chir.*
Westminster Hospital, London



AFTER three years of trial with hundreds of prostatic obstructions, Terence Millin, M.Ch., C. L. O. Macalister, M.B., and P. M. Kelly, B. Chir., still prefer retropubic prostatectomy for most cases.

Early intervention by the retropubic route involves but slight risk, convalescence is easy, and results are usually permanent.

A few technical changes have been made in the operation described several years ago. A transverse incision is now invariably employed. To prevent postoperative stricture, a wedge is cut from the vesical neck.

Preliminary urethral drainage is employed rather less frequently than formerly. If the patient's general condition is good and operation planned within thirty-six hours, a suprapubic trochar of the type used for hydroceles is inserted.

The skin is incised transversely at the upper border of the pubis. The anterior sheath of the recti is cut in a downward curve, the flap is turned up, and muscles are separated in the midline. Gauze packs should be placed on each side of the gland to define the limits and give full exposure.

The prostate is injected under the capsule with 20 cc. of 1% procaine solution containing 0.5 cc. of pitressin. The correct plane of cleavage is thus opened, bleeding reduced, and subsequent contraction of the prostatic bed hastened. The urethral mucosa should be divided at the distal limits of the lateral lobes to protect the membranous portion and prevent incontinence. For postoperative drainage a size 18 or 20 Harris rubber catheter is used.

The operation takes only twenty to thirty minutes, but should be done gently under perfect vision, with adequate exposure, careful hemostasis, and accurate reposition of damaged parts. A smash-and-grab raid in a welter of blood with interrupted suture of the capsule must be avoided.

To lessen leakage and infection the capsule should be closed in one layer rather than two or more, as sometimes advocated. If avoidable, foreign material is not used for hemostasis.

* Retropubic prostatectomy. Lancet 256:381-385, 1949.

The catheter is usually removed on the third postoperative day. Usually hospital stay is two weeks or less.

The open technic is more often used for medium-sized prostates when the surgical risk is great. In the last 200 cases 12 octogenarians had surgery with only 1 fatality.

Fibrous glands may be removed retropubically by surgeons not adept in the endoscopic technic. Patients with this type of obstruction are comparatively young and a slight increase in trauma is unimportant. The hospital stay is two or three days longer than with the transurethral route, but functional results are equally good. Open technic is better with a small urethra; closed is preferable for a stout patient with a small gland.

But a small, sclerotic, infected calculous prostate with no clear plane of cleavage should be excised by the new method. When infection is not severe, the intracapsular technic is used. Fibrous nodules are dissected with scissors, residual calculi curetted, and a generous section is taken from the sclerotic lip of the bladder outlet. Infected glands of old men require radical subtotal prostatectomy.

A few cancerous prostates are discovered in time for radical operation with hope of cure. Retropubic approach is preferred to perineal because surgery can be even more extensive. Estrogen therapy is administered for a month in advance. Prostate, vesicles, and half the bladder base are completely removed, and ureters may be implanted high in the bladder or in the colon.

Chemotherapy of Tuberculous Cystitis

ROGER C. GRAVES, M.D., AND JOHN P. SULLIVAN, M.D.*

THE miseries of intractable tuberculosis of the bladder are greatly alleviated by a combination of chaulmoogra oil and streptomycin. Pain and frequency of urination decrease, organisms vanish from smears, and the results of guinea pig inoculations may become negative, though pyuria is likely to continue.

Treatment is worth while before or after removal of the primary focus in the kidney and also when tuberculosis of the urinary tract is inoperable, believe Roger C. Graves, M.D., and John P. Sullivan, M.D., of Carney Hospital, Boston.

First, 1 cc. of moogrol is injected into the muscles daily for three days and 2 cc. for the next four days. Then, starting on the eighth day and continuing for thirty days, moogrol is administered once daily in 1-cc. doses, and 125,000 units of streptomycin is injected intramuscularly every three hours. Throughout the course of streptomycin urinary *p*H should be maintained at 7 to 7.5.

* Streptomycin and chaulmoogra oil in the treatment of tuberculosis of the urinary tract. Bull. New England M. Center 11:11-20, 1949.

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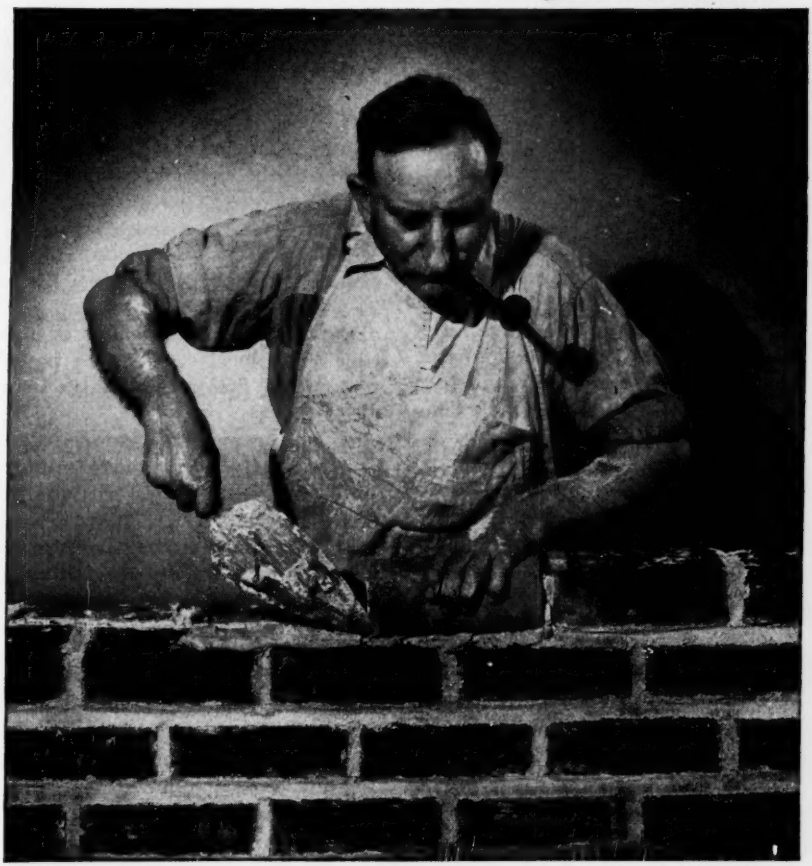

Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Examination of Small Intestine*

TO THE EDITORS: The article by Drs. Sydney Wintraub and Robert G. Williams on examination of the small bowel was so stimulating that we have incorporated the method into our work.

W. G. MILHOLLAND, M.D.

Fresno, Calif.

► TO THE EDITORS: I have always used the rather standard hourly observation method of small bowel examination. As judged by the relative rarity of consultations I am bound to conclude that those clinicians with whom I consult do not consider the examination especially valuable.

I am very glad, therefore, to find that Drs. Sydney Weintraub and Robert G. Williams have developed a variation on the method. I am sure, however, that their 200 cases or so, representing an experience with only one group, do not yet establish the method as outstandingly superior. Therefore, I will await further reports from other clinics that may have adopted the method.

Nevertheless, this is a move in the right direction. Radiologists and clinicians alike should investigate more intensively the somewhat confusing field of diseases and anomalies of the small intestine.

JOHN A. BEALS, M.D.

Jacksonville, Fla.

► TO THE EDITORS: My routine examination of the small intestine consists of giving 5 oz. of barium with about 5 oz. of water, three hours before the first fluoroscopic examination. Additional barium is given as needed to obtain a satisfactory filling of all parts of the small bowel. In some cases, multiple small meals seem to be passed through the pylorus faster than a single large one.

A fluoroscopic examination is made approximately every thirty minutes until it is felt that all parts of the small bowel have been visualized. Films are made with the patient prone and standing, whenever an unusual finding is encountered or when the various portions of the tract are shown to good advantage. Films are made through the fluoroscope as needed. Such an examination usually is concluded in one to one and a half hours after the first fluoroscopy. It is rare for the examination to take more than two and a half hours.

*MODERN MEDICINE, May 1, 1949, p. 75.

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DETT *THE MODERN WEAPON AGAINST INFECTION*

I object to the ice-cold saline technic, since it destroys the physiologic pattern of activity to a greater degree than does the room-temperature water-barium mixture. If one is looking only for anatomic variations, the ice-water method is satisfactory. I feel that considerable information can be derived from the transit time and the peristaltic activity of various segments of the small bowel.

T. J. WACHOWSKI, M.D.

Wheaton, Ill.

Management of Uterine Fibroids*

TO THE EDITORS: I thoroughly enjoyed Dr. Franklin L. Payne's article which contained many practical suggestions for the management of uterine fibroids. However, the article states:

> Hormone therapy is limited to administration of androgens. Effects are temporary, but bleeding associated with small uterine fibroids is decreased in many instances. Cautious administration may lessen blood loss for patients approaching menopause with small tumors and menorrhagia but without other symptoms until natural processes make further therapy unnecessary.

The bleeding of the menopause is characterized by a decrease in the amount and an increase in the interval between the episodes of bleeding. Menorrhagia is definitely an abnormal symptom. It is frequently the first symptom in cases of fundal, cervical, and occasionally ovarian carcinoma.

In reviewing 22 case records of the Philadelphia Pelvic Cancer Committee in which the first symptom complained of in malignancy of the fundus of the uterus was menorrhagia, I found 7 cases of uterine fibroid—4 with sarcomatous degeneration and 3 with adenocarcinoma. The ages of these patients were between forty-three and fifty-six years, with an average of forty-nine years.

It would seem imperative that, prior to administration of androgens or other therapy, any case of menorrhagia with or without uterine fibroids should have a diagnostic D and C and exploration of the cervix to rule out early pelvic malignancy.

LEIB J. GOLUB, M.D.

Philadelphia

* MODERN MEDICINE, Mar. 1, 1949, p. 62

Diagnosis of Mammary Tumors*

TO THE EDITORS: In discussing the article by Drs. Charles F. Geschickter and Philip Burka, I may state aspiration biopsy of the breast is as yet too unreliable to use as a diagnostic procedure. Many of the malignant tumors of the breast are scirrhous carcinoma, in which the cells are surrounded by very dense fibrous tissue. In these cases cells can be dislodged only with great difficulty and individual cells appear small and not very typical of malignant cells.

Since surgical biopsy of the breast does not offer any difficulty and can even be performed in any better equipped physician's office, I do not feel that we should leave this safe and simple procedure for an unsafe one, even though it may be a bit more simple. I would, therefore, advise against the use of aspiration biopsy.

EMMERICH VON HAAM, M.D.

Columbus

* MODERN MEDICINE, Jan. 1, 1949, p. 43

the tortured, gasping asthmatic

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Case MM-149

THE CLUE

ATTENDING M.D: A woman in the next room has complained of numbness and swelling of her fingers for six months. She is seventy-two years old. The finger paresthesia began at the same time as the edema and is worse in the morning. In addition her weight has increased from 170 to 189 lb. in the past four months; she has been greatly fatigued and has had cramps in the legs. She is hoarse and she believes that her voice has changed somewhat.

VISITING M.D: Let me examine her. Has her appetite increased to account for the weight change?

ATTENDING M.D: *(Walking into patient's room)* No, her appetite is poor and she feels a vague uneasiness in her abdomen after meals.

VISITING M.D: Was she getting any medication before coming here?

ATTENDING M.D: For a year she has been taking 15 drops of saturated solution of potassium iodide three times daily.

PART II

VISITING M.D: Please continue with the pertinent details of history. Had she noted anything unusual before the swelling and numbness became obvious?

ATTENDING M.D: Yes, some dryness of her nails and skin for about one year. Just before coming here, she was so weak that she remained in bed most of the time. Moreover, she was sleepy and seemed to have difficulty keeping her balance when she walked.

VISITING M.D: She lost her balance? Mmmm. The paresthesia you describe—is it always numbness? Any edema of her face or ankles? Any chest pain, orthopnea, or hypertension?

ATTENDING M.D: The loss of balance seems related to weakness. The paresthesia is limited to the hands and once or twice was tingling in nature. She has had no ankle edema, but her face has appeared bloated. Blood pressure is slightly elevated, 178/110, but has caused no symptoms other than occasional exertional dyspnea.

VISITING M.D: Tell me about the laboratory findings while I examine her.

PART III

ATTENDING M.D.: Routine laboratory tests, including serologic secretions. urinalysis, complete blood examination, sedimentation rate, serum urea and bilirubin, are all within normal limits. Roentgenograms of the chest, stomach, colon, and gallbladder are normal. Electrocardiograms showed pulse rate 65, normal

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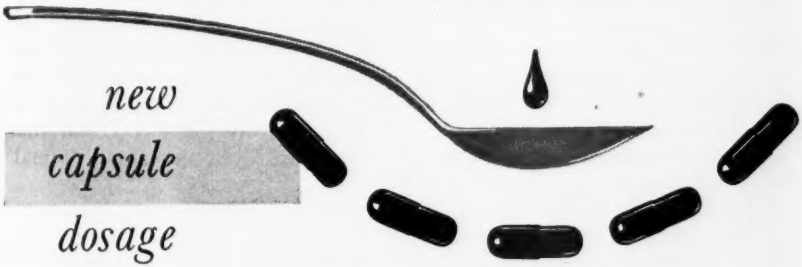

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rhythm, T waves positive, slurred QRS complexes, but otherwise nothing remarkable.

VISITING M.D: *(Looking up from examination)* What were the BMR and the serum cholesterol?

ATTENDING M.D: BMR was minus 15. Serum cholesterol was 270, and the cholesterol esters 120. We did not know how to put the whole picture together.

VISITING M.D: I am not surprised, this is a complex case. The patient certainly doesn't look very ill. The general physical examination, except for some cardiac enlargement, is not remarkable. The skin is slightly dry, the hands swollen and puffy, the hair—well—not oily. I find no evidence of muscle tenderness, no subjective sensory changes indicating peripheral neuritis. Vibratory sensation in the legs is slightly diminished, but at her age this is not remarkable. The abdominal reflexes are absent but this has no meaning in an obese person. The other reflexes are normal except the ankle jerks. These show a brisk plantar flexion, then a slow rebound. This is the characteristic reflex found in the myxedematous patient.

ATTENDING M.D: The BMR might indicate hypothyroidism but hardly myxedema.

VISITING M.D: I think it is consistent; remember she has hypertension, which could elevate the reading. Her visual fields are normal and the fundi normal. Rectal examination is negative. There is no evidence to suggest combined system disease of the cord. *(Looking over the patient's record)* Please repeat the BMR, have an x-ray film made of the head for any evidence of a pituitary tumor, and give her 2 gr. of desiccated thyroid extract daily. I will see her again with you to find out if the diagnosis of myxedema is correct.

PART IV

ATTENDING M.D: *(Three weeks later)* The second BMR was also minus 15, but today it is plus 10. Cholesterol has dropped, and the paresthesia and pains in her legs have disappeared.

VISITING M.D: The history and appearance suggested myxedema and the result of therapy is gratifying. Her mental attitude and skin, but particularly the ankle reflexes, were the main features. Today I find that the reflexes are just about normal.

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Refreshers in General Practice

This department comprises material excerpted by W. R. Feasby, M.D., Executive Editor of Modern Medicine of Canada, *from his new book* Medical Manual, *published by the University of Toronto Press, Toronto, Canada.*

Normal Values

Blood

A/G ratio	1.4: 2.0
Albumin	3.4—4.9 mg. %
Ascorbic acid	1.6 mg.% av.
Bromide, as bromide	2.0 mg. %
as sodium bromide	2.6 mg. %
Bromsulfalein, at 45 min.	less than 2%
Calcium	9—11 mg. %
CO_2 combining power	50—75 vol. %
Chlorides, as NaCl (whole blood)	450—500 mg. %
(plasma)	500—600 mg. %
Cholesterol	140—200 mg.%
Congo red absorption	15—30%
Creatinine	1—2 mg. %
Diastatic activity	15—20 units
Fat	600—700 mg. %
Fibrinogen	0.2—0.4%
Globulin	2.0—2.7%
Nonprotein nitrogen	25—40 mg. %
Phosphatase activity, acid	1.4—4.5 units (King)
alkaline	3—13 units (King)
Phosphorus, inorganic	3.0—4.5 mg. %
Potassium	16—22 mg. %
Protein, serum	5.6—7.5 %
Prothrombin time (Quick)	12—16 sec.
Pyruvic acid	0.8 mg. %
Sodium	300—355 mg. %
Sugar	80—120 mg. %
Urea nitrogen	10—18 mg. %
Urea N; N.P.N. ratio	50%

(Continued on page 80)

What Would You Say?

The caption under this cartoon was written by a professional gag-man. Can you do better? Twice a month we will select a caption written by a doctor for this cartoon and send the writer $5. Address your caption to Cartoon Editor, MODERN MEDICINE, 84 South 10 Street, Minneapolis 3, Minnesota.

"If you really value your health, I'd suggest you stop drinking to other people's."

REFRESHERS—Normal Values (Cont.)

Blood

Urea clearance, standard	40—65 or 75—120% av. normal function
maximum	60—95 or 80—130% av. normal function
Uric acid	2—4 mg. %
Van den Bergh, indirect	0.2—1.0 units
Vitamin C	1.6 mg. % av.

Cerebrospinal Fluid

Sodium chloride	720—760 mg. %
Glucose, total reducing substances	40— 60 mg. %
Nonprotein nitrogen	12— 30 mg. %
Proteins	15— 40 mg. %
Urea nitrogen	6— 15 mg. %

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6 OUTSTANDING FEATURES

1. Has wide antibacterial range
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5. Requires no dietary or fluid regulation
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Short Reports

ONCOLOGY

Inhibition of Cancer Growth

Malignant tumor growth in mice is almost completely checked by injections of guanazolo. The cancer cells are not killed, however, and regrowth starts shortly after therapy is stopped. Apparently malignant cells, unlike healthy tissue, metabolize guanine and are therefore inhibited by guanazolo, a guanine analogue. These conclusions are based on experiments with purine metabolism of the animal microorganism *Tetrahymena geleii*, by Dr. G. W. Kidder of Amherst College, Amherst, Mass., and associates. Guanazolo was administered subcutaneously and intraperitoneally to mice with transplanted mouse adenocarcinoma, spontaneous mammary cancer, or lymphoid leukemia. Results were identical with both routes and with all three types of carcinoma.

Science 109:511-514, 1949.

EXPERIMENTAL SURGERY

Cardiovascular Anastomoses

Venous obstruction due to experimental occlusion of the superior vena cava may be relieved by establishment of an alternative venous route to the heart. Dr. Frank Gerbode and associates of Stanford University, San Francisco, found shunts from the azygos vein to the superior vena cava, from the azygos vein to the atrium, and from the superior vena cava to the atrium effective in relieving congestion caused by block of the superior vena cava at different levels in dogs. Shunts from the azygos vein to the atrium frequently are unsatisfactory because of fibrosis at the suture line. In most cases, however, anastomoses between the superior vena cava and the auricle remain patent and functional. Under appropriate circumstances similar procedures might be employed in man.

Surgery 25:556-565, 1949.

RADIOLOGY

Dwarfing Effect of Continuous Radiation

Growth may be retarded by injections of radioactive phosphorus. Exposure of chick embryos and young chicks to such continuous radiation results in small but well-proportioned birds, report Drs. Shields Warren and Frank J. Dixon of Harvard University, Boston. Bone growth is retarded, the cartilage cells of the epiphysis being more radiosensitive than the osteoblasts and osteoclasts. Bones regain a normal histologic structure when radiation ceases, but remain dwarfed. Testes and ovaries are among the most sensitive organs and are least able to recover from injury. Primitive sex cells in either gonad are the most sensitive elements, but ova become more radioresistant as they mature whereas spermatogenic cells of the testis do not. Somatic cells of the gonads, though more resistant than the sex cells, are retarded in growth when the sex cells are injured.

Radiology 52:714-729, 1949.

BIOCHEMISTRY

Prothrombin Conversion Accelerator in Serum

During blood coagulation a substance in human serum arises which is capable of hastening the conversion of prothrombin to thrombin. This agent, distinct from thromboplastin or thrombin, can be separated from prothrombin-free serum. Dr. Benjamin Alexander and associates of Harvard University, Boston, have purified the substance to the extent that all the accelerating activity is contained in 20 mg. of protein from 100 cc. of serum. The serum prothrombin conversion accelerator (spca) is not the same as serum Ac globulin. The effect of spca is not obviated by moderate amounts of heparin. The amount evolved during clotting is related to the amount of prothrombin consumed and is increased by mechanical agitation of clotting blood or by the addition of thromboplastin. Amount of spca is abnormally small in sera from patients with idiopathic hypoprothrombinemia or hypoprothrombinemia induced by dicumarol.

Science 109:545, 1949.

TREATMENT

Bee Sting Therapy

Pain and swelling due to stings of bees and other insects may be relieved promptly by thephorin, an antihistaminic drug. Dr. William Theodore Strauss of Upper Montclair, N.J., feels that histamine is the toxic principle of insect venom and therefore applies a 5% thephorin ointment to the site of the sting for counteraction. No side effects have been seen.

J.A.M.A. 140:603-604, 1949.

DIAGNOSIS

Plasma Protein in Arthritis

The electrophoretic pattern of the plasma proteins in arthritic patients can be of diagnostic and prognostic value. Dr. Börje Olhagen of Stockholm finds an elevation of fibrinogen and gamma globulin in active rheumatoid arthritis. The alpha globulin also rises when fever or exudation occurs. In the advanced chronic stage the gamma globulin is high and the alpha globulin rather low. In acute rheumatic fever with only arthritis, fibrinogen and alpha globulin are increased. Involvement of the heart or serous membranes causes a rise in gamma globulin as well.

Seventh International Congress on Rheumatic Diseases, 1949, p. 113.

DERMATOLOGY

Skin Lesions of Pregnancy

Unsightly vascular spiders and patches of palmar erythema developing with gestation are no cause for distress. About three-fourths of the cutaneous changes fade by the seventh week after delivery, asserts Dr. William B. Bean of Iowa City and associates. Each type of lesion occurred in about two-thirds of white obstetric patients at Cincinnati General Hospital. More than a third of Negro women had localized or diffuse mottled reddening of palms during pregnancy and 11% had vascular spiders. Blemishes appear from second to fifth months inclusive and slowly increase in number and size until term or shortly before. High estrogen level, common to pregnancy and liver disease, may be responsible.

Surg., Gynec. & Obst. 88:739-752, 1949.

True in '38

"Because of the convenience, smaller adequate dose, and better tolerance, the trend is toward the use of ferrous sulfate . . ."

Sielke, E.L.: Rhode Island M.J. 21:61 (April) 1938

True in '48

"No iron preparation has proved superior to ferrous sulfate, with respect either to economy or efficacy."

Emerson, C.P., Jr.: M. Clin. North America 32:1264 (Sept.) 1948

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There are many iron preparations, but only Feosol Tablets provide ferrous sulfate with the special, S.K.F.-developed vehicle and coating that—

1. prevent oxidation of the ferrous sulfate into the inferior ferric form

2. assure prompt disintegration in the acid medium of the stomach and upper duodenum, where iron absorption is best.

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RADIOTHERAPY

Isotopes for Ulcer

Radioactive phosphorus applied directly to the gastric mucosa by a swallowed, inflated balloon lowers acidity of the stomach without harm to adjacent organs. A rubber bag with cotton felt surface dipped in P^{32} solution was applied to gastric pouches of dogs by Dr. Norman Simon of Mount Sinai Hospital, New York City. After beta ray doses of 20,000 to 25,000 r given in two to six hours, acid secretion stopped in 2 animals and decreased 90% or more in 3. However, acidity returned and ulcer recurred in 1 dog about three months later.

Science 109:563-564, 1949.

NEUROSURGERY

Sympathetic Ganglion Cells in Ventral Nerve Roots

Even with faultless operative technic, extirpation of appropriate segments of the sympathetic trunks or section of the white communicating rami fails to achieve complete sympathetic denervation. Failure may be due to sympathetic conduction pathways which involve synaptic connections in ventral nerve roots and do not traverse the sympathetic trunk. Dr. W. F. Alexander and associates of St. Louis University believe that section of the ventral roots of the first and second lumbar nerves in addition to extirpation of the lower two thoracic and upper three lumbar segments of the sympathetic trunk will insure sympathetic denervation of the lower extremity in most cases, since the ganglion cells associated with the ventral roots appear to be located mainly in the first and second lumbar segments. Small ganglia imbedded in ventral nerve roots or adjacent to them, usually at the site of origin of a white communicating ramus, particularly in the first and second thoracic and the first and second lumbar segments, have been observed in cadavers. Small ganglia may also be seen in communicating rami, particularly gray rami. Frequency with which direct sympathetic pathways occur is indicated by the number of times residual sympathetic activity can be demonstrated following interruption of all pathways which traverse the sympathetic trunk.

Science 109:484, 1949.

EXPERIMENTAL MEDICINE

Turnip Antithyroid Factor

A goiter-producing element has been isolated from rutabaga and synthetically reproduced. Potency about the same as for 6-*n*-propylthiouracil was proved by Dr. E. B. Astwood of the Pratt Diagnostic Hospital, Boston, and associates. The substance is considered to be L-5-vinyl-2-thioöxazolidone.

Science 109:631, 1949.

TREATMENT

Copper for Arthritis

Copper salts are occasionally of value in rheumatoid arthritis. Copper is less toxic than gold, but if prolonged action is desired treatment schedules should allow short rest periods between series of injections. Dr. Jacques Forestier and associates of Aix-les-Bains, France, find copper especially useful for early cases of rheumatoid arthritis and patients intolerant to gold.

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Mercurial Diuretic

tablets MERCUHYDRIN®

with Ascorbic Acid

One to two tablets daily will permit maintenance of patients at optimal or "dry" weight. *Tablets* MERCUHYDRIN *with Ascorbic Acid* combat the pathologic retention of water-binding sodium which imposes a mounting fluid burden on the failing heart. Effective and usually well-tolerated, they are of special value in treatment of ambulatory patients.

MERCUHYDRIN mobilizes water and sodium from inundated tissues and fosters their urinary excretion. Oral maintenance therapy . . . *Tablets* MERCUHYDRIN *with Ascorbic Acid* . . . supplements the parenteral mercurial and diminishes the number of injections required to maintain the edema-free state.

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BIOCHEMISTRY

Hormonal Abnormality in Gouty Arthritis

Adrenocortical dysfunction occurs in gout. Dr. W. Q. Wolfson and associates of Michael Reese Hospital, Chicago, report an abnormal sex hormone, gouty androgen, which appears to originate in the adrenal cortex and to control the hyperuricemia of gout. In addition, deficient production of 11-oxysteroid compounds by the adrenal cortex appears to provide the prodromal setting for an acute attack of gouty arthritis.

Seventh International Congress on Rheumatic Diseases, 1949, p. 112.

METABOLISM

Alcohol Capacity

The maximum amount of alcohol that can be consumed daily by a man of average weight is a quart of 100-proof liquor. This maximum may be achieved only by maintaining the blood alcohol concentration at a high level, since the rate of alcohol metabolism increases with blood alcohol concentration, reports Dr. Henry W. Newman of Stanford University, San Francisco.

Science 109:594-595, 1949.

HEART DISEASE

Subcutaneous Mercurial Diuretic

Mercuhydrin may be safely given subcutaneously in the buttock or upper thigh. Drs. Ralph M. Sussman and Julius Stein of Beth Israël Hospital, New York City, after more than 1,000 trials, find subcutaneous injection less painful than intramuscular and less dangerous than intravenous but just as effective as either. Nodular remnants do not form at injection sites.

Twenty-second Scientific Sessions, American Heart Association, 1949, p. 50.

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Each capsule and enteric-coated tablet contains:

Theophylline Sodium Acetate .....(3 gr.) 0.2 Gms.
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Phenobarbital Sodium .....(½ gr.) 30 Mg.

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Washington Letter

Cortisone and ACTH Data to be Collected

The U.S. Public Health Service has a tremendous new task. Without much warning, and without too much money available, Public Health Service has become the clearinghouse for work on the two new hormone compounds that may revolutionize the treatment of arthritis and several other diseases.

The compounds are cortisone (17-hydroxy-11-dehydrocorticosterone, originally called compound E) and ACTH, also known as adrenocorticotropic hormone.

The hormones were isolated, developed, and applied by investigators of the Mayo Clinic. Up to now, Merck and Company has been sole producer of cortisone and Armour Packing Company has been supplying ACTH.

However, several Public Health scientists had been working with the same general class of substances—steroids. Attention will be directed to these specific hormones. PHS will coordinate all information on the two compounds and will also assign to the project all available manpower. This activity will be directed by the Institute of Experimental Biology and Medicine of the National Institutes of Health.

"I suppose we're just a couple of skeletons to those boys."

Supply Restricted

PHS officials believe that sensational publicity in the last few weeks may have given the medical profession as well as the public a degree of unjustified optimism. They emphasize that many problems must be solved before either of the compounds will be of large-scale benefit.

Manufacture is prohibitively expensive, and the productive yield is scanty.

Cortisone is derived from the cortex of the adrenal glands of oxen, and synthesis of the substance requires thirty-seven separate steps, each time-consuming and tedious. ACTH is produced from the bile of hogs by similarly expensive and prolonged operations.

So far, little information is available on the side effects of the two new compounds. A great deal more knowledge of this phase is required.

Projects Under Way

One of the first steps in the program is organization of a study section of outstanding men in the field. Their research at nongovernment institutions will be sponsored by PHS.

PHS already has initiated other projects concerned with cortisone and ACTH. These include:

1] Research on the mechanism of action of the compounds.
2] Basic knowledge of these two and other related compounds in the steroid group.
3] A relentless search for new sources of the compounds.

Army Attempts to Lighten Soldier's Combat Pack

Army experts are at work to ascertain how big a pack a soldier can carry into action without actually endangering his own life.

In the last war, the usual pack

How mild can a cigarette be?

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

According to a Nationwide survey:

More Doctors Smoke Camels

than any other cigarette

When three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camel!

weighed 65 or 70 lb. Soldiers have been carrying approximately that weight for two thousand years or more.

Some experts declare that there is no reason for a soldier to carry more than 25 or 30 lb., with jeeps or air drops to supply him while in action. Col. S. L. A. Marshall, who interviewed thousands of soldiers on this subject in the last war, puts a great deal of emphasis on the physiologic fact that fatigue and fear breed on each other.

"Fear and fatigue are much alike," Col. Marshall says. "Both burn up glycogen and put lactic acid into the muscles. Thus fear, mounting onto fatigue, or fatigue onto fear, makes man weaker."

Navy Is Obtaining Young Doctors But Needs More

Although the Navy is having less difficulty than the Army and the Air Force in filling physician and surgeon quotas, more men are needed. A campaign is under way to interest young doctors in Navy careers. Examinations will be held at all Naval hospitals between September 12 and 16.

Base pay and additional compensation for men with dependents is $5,011 per year for lieutenant junior grade, the only class being filled in this examination. Men without dependents receive about $500 less.

Incidentally, the Navy's quota of dentists is about filled.

* * *

Dr. Howard T. Karsner, author of

When meal time is a HAPPY TIME

—then is when babies derive the most benefit from their food. Meals with taste appeal are eaten eagerly and digested more readily and Beech-Nut makes baby foods with taste appeal.

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A complete line . . .
to meet the normal dietary needs of babies.

Beech-Nut high standards of production and ALL ADVERTISING have been accepted by the council on Foods and Nutrition of the American Medical Association.

PACKED IN GLASS

the textbook *Human Pathology,* is the new medical research adviser to the Navy's surgeon general.

The Navy signed up Dr. Karsner under a new law which allows hiring of thirteen full-time professional and scientific experts at salaries above the regular civil service rates. He formerly was professor of pathology at Western Reserve University, Cleveland.

Health Service Creates Division for Geriatrics

The science of geriatrics received great impetus with the establishment within the Public Health Service of a special division. Work in geriatrics has been done individually in several divisions of PHS. The new arrangement brings all these projects into one administrative unit, the new Division of Chronic Disease.

• • •

Reshuffling at U.S. Public Health Service has advanced two prominent dental officials in government service. Dr. Bruce Forsyth, chief dental officer, becomes associate chief in the Bureau of Medical Services with the rank of assistant surgeon general. Dr. John W. Knutson becomes a division chief in the Bureau of State Services, which supervises most medical relations between the states and the federal government. Dr. Knutson had a big part in development of sodium fluoride treatment to prevent caries.

All of PHS reorganization was below the top level. The service still

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treatment of
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L.A. FORMULA

L. A. Formula is indicated in the safe and effective prevention and treatment of chronic constipation. It supplies bulk and lubrication to the intestinal contents by absorbing water and produces **normal** peristalsis. L. A. Formula is easy-to-take and pleasant-to-take and furthermore, it's economical for those who feel that they "must take something every day." Prescribe it in the next case of chronic constipation. Send for a sample now.

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has the same four bureaus: Office of the Surgeon General, Bureau of State Services, Bureau of Medical Services, and the National Institutes of Health.

AMA and Administration Argue School Health Bill

With national health insurance forgotten for the session, House hearings on the school health bill took on added interest.

The issue was a familiar one. The American Medical Association favors most provisions of the bill but opposes free medical care for children whose parents are able to pay medical fees. The administration demands equal service with no consideration of parents' income.

Oscar Ewing, the Federal Security adminstrator, was the prinicpal witness for the government. He described the widespread inadequacy of current methods of detecting and correcting children's defects.

Ewing declared that four million American school children have visual defects, one million have hearing impairment, half a million have body deformities, half a million have rheumatic fever, 200,000 have epilepsy, and 75% of all school children need dental care.

Dr. Walter B. Martin of Norfolk headed the AMA witnesses, who agreed with Mr. Ewing on most of his findings and were willing to accept most provisions of the bill. However, they reiterated the AMA policy of opposing free treatment for all, con-

tending that the administration's plan of disregarding ability to pay embodies a false and costly philosophy which runs counter to American tradition.

Government's Best Seller for Expectant Mothers Revised

A rewritten edition of *Prenatal Care*, which for more than thirty-five years has topped the government's best-seller list, may now be obtained from Children's Bureau, Federal Security Agency, Washington 25, D.C. There is no charge to parents or professional workers for single copies. Bulk orders of 100 or more may be purchased from Government Printing Office, at 15¢ each, minus 25% discount.

More Than 83,000 GI's Studying Medical Sciences

Of all GI trainees 3%, or 83,000, are studying medical sciences. Of these, 23,260 are taking courses in medicine and surgery and 7,603 are studying dentistry. . . . Veterans Administration is offering 259 one-year scholarships, effective July 1, 1950.

Seek Effect of Drugs and Liquor on Flying Skill of Pilots

Navy medical researchers will soon announce results of tests to find out the exact effects of liquor and various drugs on flying skill. One of the things they want to discover is the effect of atabrine and new antiallergy drugs on the cockpit reactions of the military pilot.

Current Books & Pamphlets

This catalogue is compiled from all available sources, American and foreign, to insure a complete listing of the month's releases.

Medicine

EVALUATION OF CHEMOTHERAPEUTIC AGENTS *edited by* Colin M. MacLeod. 205 pp., ill. Columbia University Press, New York City. $4

PSYCHOSOMATIC MEDICINE: THE CLINICAL APPLICATION OF PSYCHOPATHOLOGY TO GENERAL MEDICAL PROBLEMS *by* Edward Weiss *and* O. Spurgeon English. 2d ed. 803 pp. W. B. Saunders Co., Philadelphia. $9.50

FUNDAMENTALS OF INTERNAL MEDICINE *by* Wallace Mason Yater. 3d ed. 1,469 pp., ill. Appleton-Century-Crofts, New York City. $12

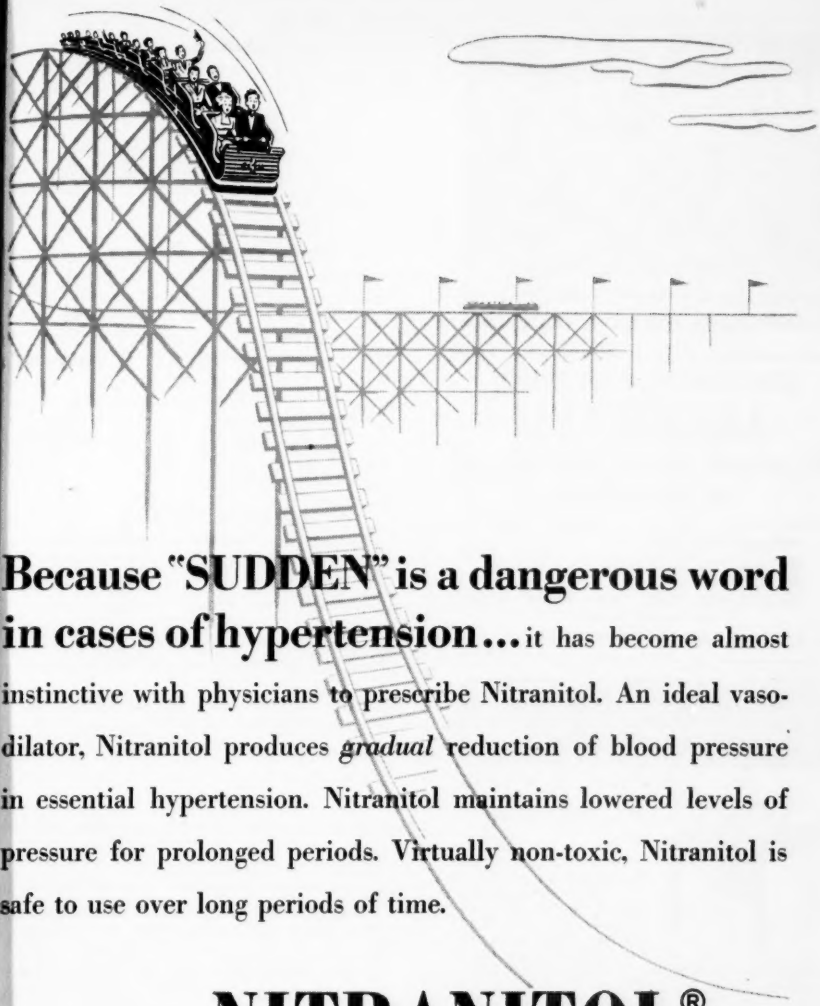
Surgery

A COMPANION IN SURGICAL STUDIES *by* Ian Aird. 1,068 pp. E. & S. Livingstone, Edinburgh. 63s.

OPERATIVE TECHNIC IN GENERAL AND SPECIALTY SURGERY: VOLUME I *edited by* Warren H. Cole. 988 pp., ill. Appleton-Century-Crofts, New York City. $15

Obstetrics & Gynecology

PREGNANCY DIAGNOSIS TESTS *by* Alfred T. Cowie. 283 pp. Commonwealth Agricultural Bureaux, Reading, England. 15s.



Because "SUDDEN" is a dangerous word in cases of hypertension... it has become almost instinctive with physicians to prescribe Nitranitol. An ideal vasodilator, Nitranitol produces *gradual* reduction of blood pressure in essential hypertension. Nitranitol maintains lowered levels of pressure for prolonged periods. Virtually non-toxic, Nitranitol is safe to use over long periods of time.

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For gradual, prolonged, safe vasodilation

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When sedation is desired. *Nitranitol with Phenobarbital.* (¼ gr. Phenobarbital combined with ½ gr. mannitol hexanitrate.)

For extra protection against hazards of capillary fragility. *Nitranitol with Phenobarbital and Rutin.* (Combines Rutin 20 mg. with above formula.)

Neurology

DIE SYNKOPALEN ANFALLE *by* Walter Schulte. 2d ed. 92 pp., ill. Georg Thieme, Stuttgart. 9.60 M.

DAS ZWISCHENBIRN: SYNDROME, LOKALISATIONEN, FUNKTIONEN *by* W. R. Hess. 187 pp., ill. Benno Schwabe & Co., Basel, Switzerland. 15 Sw. fr.

Cardiovascular Diseases

CORONARY ARTERY DISEASE *by* Ernst P. Boas *and* Norman F. Boas. 399 pp., ill. Year Book Publishers, Chicago. $6

AN INTRODUCTION TO CARDIOLOGY *by* Geoffrey Bourne. 264 pp., ill. Williams & Wilkins Co., Baltimore. $5

A PRIMER OF ELECTROCARDIOGRAPHY *by* George E. Burch *and* Travis Winsor. 2d ed. 245 pp., ill. Lea & Febiger, Philadelphia. $4.50

Infectious Diseases

EPIDEMIOLOGY OF HEMOLYTIC STREPTOCOCCUS *by* Alvin F. Coburn *and* Donald C. Young. 229 pp., ill. Williams & Wilkins Co., Baltimore. $4

THE TREATMENT OF PNEUMOCOCCIC PNEUMONIA IN THE ADULT *by* Morris F. Collen. 166 pp. Permanente Foundation, Oakland, Calif. $3

FIGHTING SPOTTED FEVER IN THE ROCKIES *by* Esther Gaskins Price. 269 pp., ill. Naegele Printing Co., Helena, Mont. $4

Pediatrics

CHILD HEALTH SERVICES AND PEDIATRIC EDUCATION. 270 pp., ill. Commonwealth Fund, New York City. $3.50

ADOLESCENT DEVELOPMENT *by* Elizabeth Bergner Hurlock. 566 pp., ill. McGraw-Hill Book Co., New York City. $4.50

SOME SPECIAL PROBLEMS OF CHILDREN AGED 2 TO 5 YEARS *by* Nina Ridenour *and* Isabel Johnson. 2d ed. 72 pp. National Mental Health Foundation, Philadelphia. 25 cents

Ophthalmology

TEXTBOOK OF OPHTHALMOLOGY: VOLUME IV *by* Sir W. Stewart Duke-Elder. 1,157 pp., ill. Henry Kimpton, London. 70s.

ATLAS DER AUGENKRANKHEITEN: SAMMLUNG TYPISCHER KRANKHEITSBILDER MIT KURZEN DIAGNOSTISCHEN UND THERAPEUTISCHEN HINWEISEN *by* Rudolf Thiel. 5th ed. 225 pp., ill. Georg Thieme, Stuttgart. 60 M.

Forensic Medicine

MOLLISONS FORENSIC MEDICINE LECTURES *edited by* Keith Macrae Bowden. 5th ed. 282 pp., ill. W. Ramsay (Surgical) Pty., Ltd., Melbourne, Australia. 37*s*. 6*d*.

SYMPOSION ON MEDICOLEGAL PROBLEMS *edited by* Samuel A. Levinson. 276 pp., ill. J. B. Lippincott Co., Philadelphia. $5

FORENSIC MEDICINE *by* Sir Sydney Smith. 9th ed. 658 pp., ill. J. & A. Churchill, London. 30*s*.

Biography

JOSEPH BOLIVER DE LEE, CRUSADING OBSTETRICIAN *by* Morris Fishbein *and* Sol Theron De Lee. 313 pp. E. P. Dutton & Co., New York City. $5

LAWSON TAIT, 1845-1899 *by* I. Harvey Flack. 148 pp., ill. William Heinemann Medical Books, London. 17*s*. 6*d*.

SIAM DOCTOR *by* Jacques M. May. 255 pp. Doubleday & Co., Garden City, N.Y. $2.75

RONALD ROSS, DISCOVERER AND CREATOR *by* R. L. Mégroz. 282 pp., ill. Macmillan Co., New York City. $3

Health Education

THE EMOTIONAL PROBLEMS OF CHILDHOOD: A BOOK FOR PARENTS AND TEACHERS *by* Zoë Benjamin. 178 pp. University of London Press, London. 7*s*. 6*d*.

HELP YOURSELF TO BETTER SIGHT *by* Margaret D. Corbett. 218 pp., ill. Prentice-Hall, New York City. $2.50

FEARLESS CHILDBIRTH: WHAT EVERY MOTHER-TO-BE SHOULD KNOW *by* Minnie Randell. 108 pp., ill. J. & A. Churchill, London. 3*s*. 6*d*.

Nursing

NURSING OF THE SICK 1893 *edited by* Isabel A. Hampton *et al.* 218 pp. McGraw-Hill Book Co., New York City. $3.50

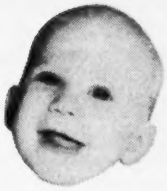
TRENDS IN NURSING HISTORY: THEIR RELATIONSHIP TO WORLD EVENTS *by* Elizabeth M. Jamieson *and* Mary F. Sewall. 3d ed. 632 pp., ill. W. B. Saunders Co., Philadelphia. $4.50

THE AMERICAN NURSE'S DICTIONARY: DEFINITION AND PRONUNCIATION OF TERMS IN THE NURSING VOCABULARY *by* Alice L. Price. 656 pp. W. B. Saunders Co., Philadelphia. $3.75

38 Million Times a Month

CARNATION SAYS:

"ASK YOUR DOCTOR"



CARNATION SINCERELY BELIEVES that the health of our nation's babies is too precious a thing to be left to the well-meant but doubtful advice of friends or relatives.

So year after year, month after month, Carnation advertising messages urge mothers to *go to their doctor* for advice on infant feeding. In an average month, Carnation newspaper, magazine and radio advertising repeats this advice *38 million times:* "Ask your doctor."

And Carnation is proud to report that this consistent educational program is producing definite results. Here is the evidence:

8 OUT OF 10 MOTHERS USING CARNATION REPORT THAT IT WAS RECOMMENDED BY THEIR DOCTOR OR HOSPITAL.

How Carnation Protects the Doctor's Recommendation

You can prescribe Carnation Evaporated Milk *by name* with complete confidence. Every drop in every can of Carnation is processed with *"prescription accuracy" in* Carnation's *own* plants under Carnation's *own* step-by-step supervision. Carnation Milk is always the same safe source of dependable nutrition for infants.

The Milk Every Doctor Knows

"From Contented Cows"

PATIENTS . . . I Have Met

The editors will pay $1 for each story published. No contribution will be returned. Send your experiences to the Patients I Have Met Editor, MODERN MEDICINE, 84 South Tenth St., Minneapolis 3, Minn.

Literal Interpretation

"I'm sorry to hear that your husband is still in bed," the new doctor said sympathetically to Aunt Jane.

"Oh yes, sir, he's in bed, all right," replied Aunt Jane cheerfully, "but I don't worry, because he ain't sick."

"Then why doesn't he get up?" asked the puzzled doctor.

"Well, here's how 'tis, doctor," she explained. "Before you came the other doctor told my husband not to get up until he visited him again. That was three months ago, and now that doctor has gone and joined the army."—O.B.

"Now let me tell you something, Mrs. Barly!"

Salvage

A Scotsman was talking to his son, who had just been admitted to practice.

"Son," he said, "the first time a patient comes to you give him a bottle of blue pills. The next time give him a bottle of pink pills. Then ask him to bring in a specimen of urine from the morning and from the evening. In that way you get your bottles back."—C.B.

Count the features on the fingers

"Miller" brand surgeons' gloves give you 10 advantages for fit, strength and service

"As many features as there are fingers" — that's what surgeons find when they use B. F. Goodrich "Miller" brand gloves.

1. Long wrists to fit snugly over the cuffs of gowns.
2. Full backs to conform to the natural shape of the hand, allow flexing without restriction.
3. Tapered fingers for better fit. These gloves are made on sculptured hand forms.
4. Tissue thinness, even at the finger tips. No heavy ends to interfere with sensitivity.
5. Economical to use.
6. Complete absence of heavy places. Anode latex is deposited evenly for uniform tissuelike thinness.
7. No weak spots — even between the fingers where many gloves fail.
8. No weakening foreign particles in the rubber or between layers of the rubber because "Miller" brand gloves are all *one* layer.
9. Safe—even after 15 sterilizations, tensile strength is more than 2000 pounds per square inch, a big margin of safety.
10. Accurate sizing in a full range to fit the hands.

The B. F. Goodrich Company, Sundries Division, Akron, Ohio.

B.F.Goodrich
FIRST IN RUBBER

Positive Identification

I was called to deliver a young woman about five and one-half months after her marriage. During the delivery I remarked to her husband whom I knew very well, "This is a little early, isn't it, John?"

John looked at me and said with conviction, "Well, I know whose it is."—R.F.

Just a Family Party

When I entered private practice one of my first prenatal patients was a girl from the mountains. A doctor in a neighboring community had taken care of her for the first six months of her pregnancy and then referred her to me as he was going to be away at the time of her expected confinement. The young lady went to great lengths to be certain that I would not plan a vacation or a trip at the time of her delivery. She concluded by emphatically declaring, "I don't want any strangers in the delivery room!"
—S.S.L.

"Nice job, George. I wonder where I laid my glasses."

A Fiddler

Tony consulted me with the hope I could help him. He had nine children and wanted no more. I handed him a condom and told him to put it on his organ. In a month he returned to inform me that his wife was pregnant again. I asked him if he had done as I instructed.

"Doc," he replied, "I no got organ so I put rubber on violin."—F.H.S.

Help For Your OBESITY Problems

To help you put overweight patients on the road to health —to help them reduce safely and *maintain normal weight after reduction*— send for these useful booklets: "Low-Calorie Diets," 1200 and 1800-calorie diets for adults; "Through The Looking Glass," 1500-calorie diets for teen-age girls. **They can save you many hours of consultation time.**

Diets in these booklets are carefully balanced to supply essential nutrients. Exact sizes of servings are given so no calorie counting is necessary. Psychological factors are considered, to help overcome desire for high-calorie food. Thus the lasting benefits of "stay slim" habits are acquired.

Ry-Krisp: only 23 calories per wafer, bulk for satiety, all the protein, minerals and vitamins of whole-grain rye.

USE COUPON FOR FREE BOOKLETS

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MM-11 Checkerboard Square, St. Louis 2, Missouri

Please send (indicate quantity):

_____C3049, "Low-Calorie Diets"- - - - - - - - Imprinted? Yes_____ No_____

_____C966, "Through the Looking Glass"

Name_____M.D.

Street_____

City_____Zone_____State_____

"Didn't you hear me go 'Beep, beep'?"

Compulsion

I asked the eighty-five-year-old man why he wanted a health certificate.

"Going to get married," was the answer.

"So you want to get married at the age of eighty-five?"

"Don't want to, Doc—just got to."—A.D.

He Wasn't Born Yesterday

An eight-year-old boy came to our office for his annual examination. The nurse fastened a cloth bag around the young man's arm and began to inflate it.

"What's that?" he demanded.

"To test your blood pressure," she said.

"You can't fool me," he protested. "It's a lie detector!"—R.R.

"A proctologist," explained Probie, "may be described as a super-duper pooper snooper."

Why Not?

About forty years ago I delivered a boy baby in the same room of the same house in which Jesse James was killed. The mother had severe after pains and I gave her some medicine, remarking, "If this does not relieve you, I will give you some that will."

She said, "Doctor, why don't you give me that medicine now?"—W.H.

for a

PHYSIOLOGIC FALL

in blood pressure

Of the many drugs used to lower arterial pressure in hypertension, Biologically Standardized veratrum viride (in CRAW UNITS*) is the only drug that produces a physiologic fall in blood pressure. VERATRITE represents a practical modification of this effective hypotensive drug for everyday management of the mild and moderate cases of essential hypertension. Prolonged action, wide range of therapeutic safety and complete simplicity of administration are specific advantages of Veratrite therapy. Each Veratrite Tabule contains: Biologically Standardized veratrum viride 3 CRAW UNITS; sodium nitrite 1 grain; phenobarbital ¼ grain.

Samples and literature on request.

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Facts About Conception Control

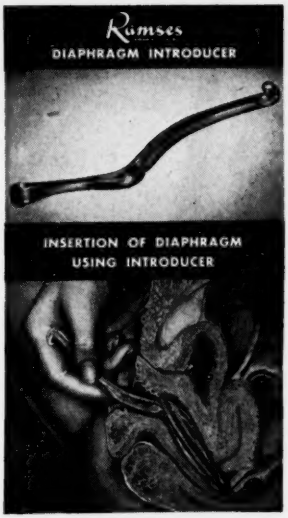
THE USE OF THE DIAPHRAGM INTRODUCER

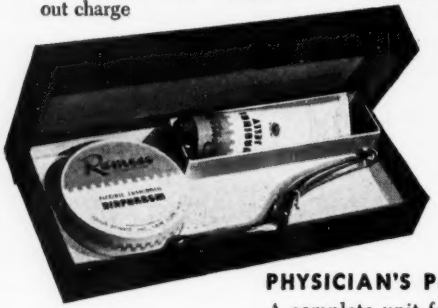
Use of a diaphragm introducer is favored by many patients who find manual manipulation objectionable or difficult. It facilitates the insertion and correct placement of the diaphragm, as well as its removal.

The "RAMSES"* Diaphragm Introducer provides the following features:

- Simplicity and convenience in use
- Safety – design minimizes possibility of injury to the cervix or accidental insertion into the urethra
- Smooth surface lessens bacterial proliferation – makes for easy cleaning
- Ease of removal assured by bluntly hooked end

The "RAMSES" Diaphragm Introducer is supplied in the Physician's Prescription Packet No. 501, without charge





Ramses

PHYSICIAN'S PRESCRIPTION PACKET NO. 501

A complete unit for conception control. Contains (1) a "RAMSES" Flexible Cushioned Diaphragm of the prescribed size, (2) a "RAMSES" Diaphragm Introducer of corresponding size, and (3) a tube of "RAMSES" Vaginal Jelly† (regular size).

* The word "RAMSES" is a registered trademark of Julius Schmid, Inc.

† Active Ingredients: Dodecaethyleneglycol Monolaurate 5%; Boric Acid 1%; Alcohol 5%.

gynecological division

Julius Schmid, Inc.

423 West 55th Street, New York 19, N. Y.

quality first since 1933

"RAMSES" Vaginal Jelly is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. The "RAMSES" Diaphragm and Diaphragm Introducer are accepted by the Council on Physical Medicine of the American Medical Association.

when edematous mucous membranes cause nasal obstruction . . .

—in hay fever—the vasoconstrictive effect of Neo-Synephrine hydrochloride ¼% to 1% on the engorged mucous membrane is rapid and prolonged—but with virtually no discomfort.

The patient quickly experiences welcome relief of the "stuffy" feeling, breathing is eased, drainage is promoted, and general irritation is lessened. Neo-Synephrine hydrochloride is a valuable aid in circumventing sleeplessness which may be associated with hay fever—for its protracted shrinking effect on the nasal membranes overcomes the annoyance of "mouth breathing."

Neo-Synephrine hydrochloride exerts an undiminished effect after repeated use; it usually does not produce compensatory congestion, and has virtually no central stimulating action.

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SUPPLIED AS

- ¼% and 1% strengths in isotonic saline solution—1 oz. bottles.
- ¼% in isotonic solution of three chlorides (Ringer's) with aromatics—1 oz. bottles.
- ½% water soluble jelly—⅓ oz. tubes.

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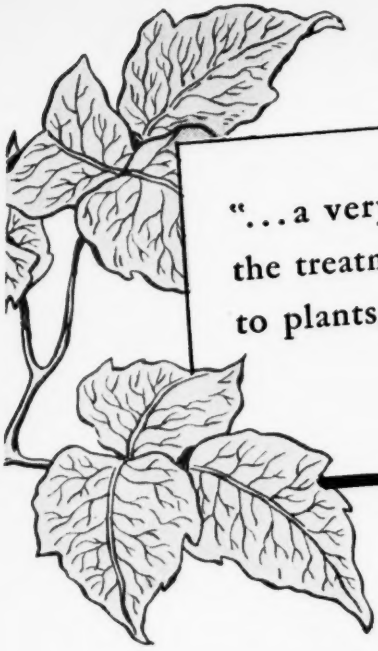

"...a very valuable adjunct to the treatment of dermatitis due to plants, especially

POISON IVY..."[1]

PYRIBENZAMINE cream or ointment

Applied locally, Pyribenzamine hydrochloride usually gives prompt and prolonged relief from itching in dermatitis venenata due to poison ivy, oak or sumac.

Pyribenzamine has also been found to give relief to the majority of patients with other itching dermatoses, "particularly atopic dermatitis and pruritus ani."[2]

"In many instances the local skin conditions are, of course, more rapidly and more completely eradicated by the combined topical and oral administration of this drug."[1]

1. Carrier, R. E., Krug, E. S., and Glenn, H. R.: J. Lancet, 68: 240, June 1948.
2. Feinberg, S. M. and Bernstein, T. B.: J. of A.M.A., 134: 10, July 1947.

PYRIBENZAMINE CREAM, 2 per cent (water-washable base), jars of 50 Gm. and 1 pound; Ointment, 2 per cent (petrolatum base), jars of 50 Gm. and 1 pound.

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